

# DRAFT

## \*TM 9-1300-280-12&P

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### TECHNICAL MANUAL

### OPERATOR AND UNIT MAINTENANCE MANUAL FOR NON-LETHAL CAPABILITY SET (NLCS) (NSN TBD)

DISTRIBUTION STATEMENT C - Distribution authorized to US Government agencies and their contractors only because this publication contains sensitive information on new items. This determination was made on 27 January 2000. Other requests for this document will be referred to: Commander, US Army, TACOM, Armament Research, Development and Engineering Center, ATTN: AMSTA-AR-WEL, Picatinny Arsenal, New Jersey 07806-5000.

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## HEADQUARTERS, DEPARTMENT OF THE ARMY

## 1 SEPTEMBER 2000

\*This publication supersedes DRAFT TM 9-1300-280-12&P, dated 12 April 2000.

# DRAFT

## WARNING SUMMARY

The caltrops has sharp points. To avoid injury, handle carefully.

Lithium batteries can explode or cause burns if disassembled, shorted, recharged or exposed to fire or high temperatures. Handle with care.

To avoid injury, all strap and tie connections on the training suit must be secured prior to use. Do not overtighten straps, blood flow restriction can occur.

High intensity light is very hot when in use and can cause serious skin burns therefore, do not touch lens when light is on; turn off unit when replacing filter.

High intensity light can cause eye damage therefore; do not point light directly at face of person closer than 50 feet; do not shine light into eyes of oncoming drivers.

To prevent electrical hazard, do not immerse high intensity light in water.

Do not operate high intensity light in an explosive environment. Battery may vent and release flammable gas. Charge battery in well-ventilated room or open air.

The siren of the portable bull horn is very loud even when volume is low. Use caution when operating as injury to hearing can occur.

Minimize sound before using portable bull horn before speaking into microphone to avoid injury to hearing.

To avoid potentially harmful feedback, always point portable bull horn microphone away from speakers.

Feedback from ground mounted bull horn can damage hearing and equipment. Always be sure that volume controls are at a minimum before using bull horn. If feedback occurs, reduce volume.

Non-lethal munitions have the potential for inflicting lethal injuries and should be used with discretion. Do not fire at live targets during training.

Never fire a round of any type to dislodge a projectile lodged in the barrel.

When firing the 12-gauge flash-bang round, aim weapon so that projectile explodes no closer than 3 meters from target.

All personnel within 20 meters of the firing position of the 12-gauge flash-bang round should wear hearing protection (plugs or muffs).

Gunners firing the 12-gauge flash-bang round should fire only from well ventilated places, as no toxic fume tests were performed on the round.

Beyond 20 meters, 12-gauge non-lethal rounds lose accuracy and may no longer have the velocity required to stun an individual.

12-Gauge and 40MM non-lethal rounds fired at subjects closer than 10 meters, or which strike the head or groin can cause serious injury or death.

Use 40mm sponge point grenade (M1006) with launcher M203. 40mm non-lethal munitions cannot be used with the MK19 MOD3 40mm grenade machine gun.

Use a dedicated M203 gunner for the M1006 non-lethal cartridge separate from the M203 gunners that use black powder non-lethal rounds. This will avoid the potential for lodged M1006.

## WARNING SUMMARY - Continued

Observe all specified limits for storage and firing of the M1006. Only fire rounds between ambient temperatures of 0 and 125 degrees Fahrenheit.

Do not fire M1006 against hard surfaces closer than 20 meters. There is a potential for rebounds and eye damage could occur. Eye protection for the gunner is recommended.

Do not mix the M1006 non-lethal cartridge with other types of non-lethal munitions and do not mix with live service ammunition of the same caliber.

Plastic residue on the barrel produced from firing the M1006 cannot be removed with the standard M203 cleaning kit bore brush. Use the metal bristle bore brush from the 40mm MK19 grenade machine gun kit, or fire a 40mm M781 practice or 40mm M433, HEDP cartridge to remove the residue.

To prevent unintentional discharge of CR agent, do not carry unlocked disperser in pouch at any time. Do not depress top of pouch while disperser is inside.

When entering restricted space or conducting an action which might exert pressure on the disperser top or pouch (e.g., buckling seat belt) be sure to avoid pressure on disperser or pouch.

When using non-ballistic face shield, when visor is down, ensure forward edge of seal contacts visor to prevent seepage of liquid between visor and helmet which could harm wearer.

Place non-ballistic face shield in the down position to maximum protection during non-ballistic confrontations.

Be sure that bolts on the ballistic body shield do not protrude more than 0.125 inches to prevent injury to personnel. Do not overtighten cross-head screws. Doing so might crack plastic and seriously degrade shield performance.

HEADQUARTERS,  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC, 1 SEPTEMBER 2000

TECHNICAL MANUAL  
OPERATOR AND UNIT MAINTENANCE MANUAL  
NON-LETHAL CAPABILITY SET (NLCS)  
NSN TBD

**REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual, direct to: Commander, U.S. Army TACOM, Armament Research, Development and Engineering Center, ATTN: AMSTA-AR-WEL-S, Picatinny Arsenal, NJ 07806-5000. You may also send in your recommended changes via electronic mail or by fax. Our e-mail address is LSB@PICA.ARMY.MIL. Our fax number is DSN 880-4633, Commercial (973) 724-4633. A reply will be furnished to you.

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## HOW TO USE THIS MANUAL

### GENERAL

This manual contains all descriptive, operational, troubleshooting and maintenance information required to operate and maintain the Non-Lethal Capability Set.

### CONTENT OF MANUAL

This manual is divided into 6 chapters:

- Chapter 1, Description and Theory of Operation
- Chapter 2, Operator Instructions
- Chapter 3, Troubleshooting Procedures
- Chapter 4, Operator Maintenance Instructions
- Chapter 5, Unit Maintenance Instructions
- Chapter 6, Supporting Information

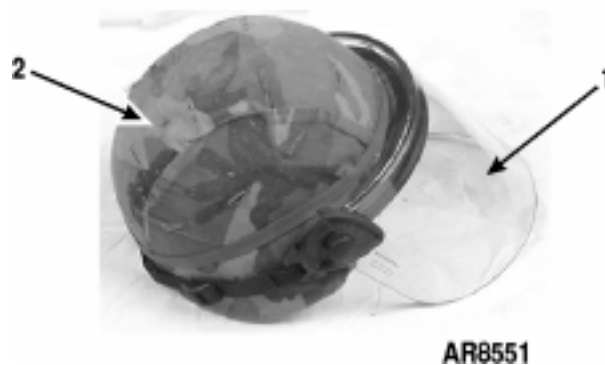
### HOW TO ACCESS INFORMATION QUICKLY

The chapters are divided into work packages (WP). Each WP is assigned a six digit sequence number. The sequence numbers run consecutively throughout the manual. The first four digits of the WP sequence number are based on the location of the WP (e.g., 0005 00 is the fifth WP). The last two digits are reserved for WPs added after initial publication (e.g., 0005 01 is a WP added between WP 0005 00 and 0006 00). WP page numbers are numbered consecutively and consist of the WP sequence number followed by -1, -2, -3, etc. (e.g., 0005 00-1, 0005 00-2, etc.).

### SUPPORTING ILLUSTRATIONS

All supporting illustrations are located on the same or facing page as the text they support. Illustrations are labeled with numbers reflecting referenced callouts in the text, for example:

Attach the face shield (1) to the helmet (2).



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## GENERAL INFORMATION

### SCOPE

This technical manual contains operation and maintenance instructions for non-lethal items as well as provides descriptions and data for non-lethal ammunition that comprise the Non-Lethal Capability Set (NLCS).

Type of Manual: Operator and Unit Maintenance.

Equipment Name(s): Non-Lethal Capability Set (NLCS).

Purpose of Equipment: The Non-Lethal Capability Set (NLCS) provides a commander with various non-lethal options during military Stability and Support Operations (SASO) dealing with, but not limited to, riot control and other civil disturbances.

### MAINTENANCE FORMS, RECORDS, AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, Functional Users Manual for The Army Maintenance Management System (TAMMS). Accidents involving injury to personnel or damage to material will be reported on DA Form 285 (Accident Report) in accordance with AR 385-40. Explosives and ammunition malfunctions will be reported in accordance with AR 75-1.

### REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIR)

If your Non-Lethal Capability Set needs improvement, let us know. Send us an EIR. You, the user, are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF 368 (Product Quality Deficiency Report). Mail it to the address specified in DA PAM 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS), or as specified by the acquiring activity. We will send you a reply.

### CORROSION PREVENTION AND CONTROL (CPC)

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber and plastic. Unusual cracking, softening, swelling, or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report. Use of key words such as "corrosion," "rust," "deterioration," or "cracking" will ensure that the information is identified as a CPC problem.

The form should be submitted to the address specified in DA PAM 738-750, Functional Users Manual for the Army Maintenance Management System (TAMMS).

### PREPARATION FOR STORAGE OR SHIPMENT

The storage site should protect the NLCS from the elements and allow access for visual inspection.

### NOMENCLATURE CROSS-REFERENCE LIST

| <u>Common Name</u> | <u>Official Nomenclature</u>    |
|--------------------|---------------------------------|
| Stinger            | 40mm Multiple Rubber Ball Round |



## LIST OF ABBREVIATIONS/ACRONYMS

| <b><u>Abbreviation/Acronym</u></b> | <b><u>Definition</u></b>                    |
|------------------------------------|---|
| BII                                | Basis of Issue Items                        |
| CAGEC                              | Commercial and Government Entity Code       |
| COTS                               | Commercial Off The Shelf                    |
| CPC                                | Corrosion Prevention and Control            |
| CTA                                | Commercial Table of Allowances              |
| COEI                               | Components of End Item                      |
| DRS                                | Disposable Restraint System                 |
| EIR                                | Equipment Improvement Recommendations       |
| EPW                                | Enemy Prisoner of War                       |
| GOTS                               | Government Off The Shelf                    |
| HMMWV                              | High Mobility Multi-Purpose Wheeled Vehicle |
| MAC                                | Maintenance Allocation Chart                |
| MCCM                               | Modular Crowd-Control Munition              |
| MOOTW                              | Military Operations Other Than War          |
| NL                                 | Non-Lethal                                  |
| NLCS                               | Non-Lethal Capability Set                   |
| NSN                                | National Stock Number                       |
| PASGT                              | Personnel Armor System Ground Troops        |
| PN                                 | Part Number                                 |
| RCA                                | Riot Control Agent                          |
| SRA                                | Specialized Repair Activity                 |
| SASO                               | Stability And Support Operations            |
| TAMMS                              | The Army Maintenance Management System      |
| TBD                                | To Be Determined                            |
| TMDE                               | Test, Measurement and Diagnostics Equipment |
| TOE                                | Table of Equipment                          |
| WP                                 | Work Package                                |

## SAFETY, CARE AND HANDLING

### Non-Ballistic Riot Face Shield and Non-Ballistic Riot Body Shield

The non-ballistic riot face shield and body shield are made of polycarbonate plastic. Gasoline and similar hydrocarbon solvents damage the plastic and eventually the shield will crack. Proper handling is required. Avoid ANY exposure to gasoline, diesel, solvents or chemicals. Avoid scratching while handling components.

### Batteries

Lithium batteries can explode or cause burns if disassembled, shorted, recharged or exposed to fire or high temperatures.

Do not touch the battery terminals on the high intensity light with any metal object. A short circuit could result.

**CHAPTER 1**

**DESCRIPTION AND THEORY OF OPERATION**  
**FOR**  
**NON-LETHAL CAPABILITY SET**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**EQUIPMENT DESCRIPTION AND DATA**

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**EQUIPMENT CHARACTERISTICS, CAPABILITIES, AND FEATURES**

**General**

The Non-Lethal Capability Set (NLCS) supports Army units selected to participate in ground force operations where a non-lethal (NL) capability is required; e.g., Military Operations Other Than War (MOOTW), civil disturbance, riot control, less than lethal. The set enhances a commander's ability to conduct operations throughout the full spectrum of peace and conflict operations. Army units conducting Stability And Support Operations (SASO) or other missions anywhere in the world (domestic and foreign) where NL force options are needed will use a NLCS to enhance their force protection and reduce non-combatant casualties.

The NLCS is designed to enhance operations of existing systems. This minimizes training time for soldiers already familiar with the basic systems and only requires soldiers to train on the unique characteristics of the NL munitions that will be employed from the system.

**Components**

The NLCS contains the weapons systems, munitions and equipment required to satisfy the operational requirement for an enhanced capability to apply non-lethal force. The components are explicitly designed and primarily employed to incapacitate personnel or material, while minimizing fatalities or permanent injury to intended targets and collateral damage to property and the environment.

**Individual Protective Equipment.** Non-ballistic riot face shield, body shield and shin guards provide protection from threats such as debris, liquids and hand thrown objects. Ballistic face shield, body shield and shin guards provide protection from threats such as flammable liquids, hand thrown objects and direct/indirect fire, and are bullet resistant (9 mm and .44 Magnum pistol rounds). The individual protective equipment is capable of being used with current weapons, clothing and equipment normally carried, worn or used when carrying out a mission.

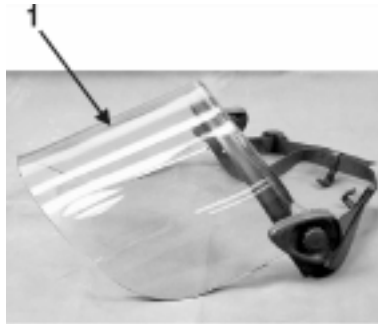
**Weapons.** Munitions (such as 40mm area and point rounds) are provided for weapons already supplied to a unit and give soldiers the capability for NL fire on crowds; individuals are stunned or deterred without the body being penetrated. Unique weapons (such as Riot Control Agent (RCA) dispersers, 12 gauge shotguns, and batons) provide soldiers the capability of self-defense or restraining rioters.

**Enhancement Devices.** Lights (such as 12 gauge shotgun lights or body shield lights) and voice amplifying devices (such as bullhorns or audio frequency amplifiers for protective masks) are provided to increase command and control capabilities during operations such as low-light or crowd noise conditions. Devices (such as Caltrops) are also provided that can be used for individual, group or vehicle area denial, or that can augment access control or check point operations.

**Training Devices.** Training devices (such as riot training suits and riot training bags) and training ammunition provide soldiers the ability to become accustomed to duty weapons in a training environment.

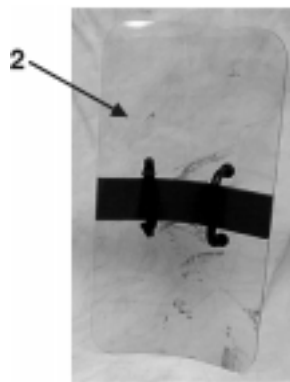
## LOCATION AND DESCRIPTION OF MAJOR COMPONENTS

**NON-BALLISTIC RIOT FACE SHIELD:** The non-ballistic riot face shield (1) provides the soldier with face protection. It has a transparent visor with an internal lip that keeps the top edge of the visor above the rim of the helmet for a tight seal. The visor has a latch assembly that locks the visor into the up or down positions.



AR 8496

**NON-BALLISTIC RIOT BODY SHIELD:** The non-ballistic riot body shield (2) provides the soldier with torso protection. It has two ambidextrous arm/hand loops for carrying that are covered with a non-slip material.



AR 8497

**NON-BALLISTIC RIOT SHIN GUARDS:** The non-ballistic riot shin guards (3) provide the soldier with protection for the front of the leg, the knee, and the top of the foot. The shin guards are attached using four adjustable buckle straps.

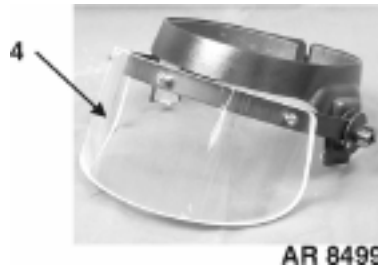


AR 8498

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**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued**

**BALLISTIC FACE SHIELD:** The ballistic face shield (4) provides the soldier with face protection. The transparent visor curves and conforms to the face, providing peripheral vision.



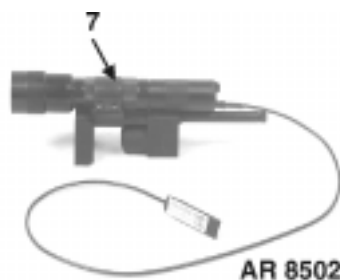
**BALLISTIC BODY SHIELD:** The ballistic body shield (5) provides the soldier with torso protection. The ballistic body shield has a padded ambidextrous handle and harness assembly, allowing for one-hand or two-hand operation. A pad provides impact protection for the forearm and hand.



**BALLISTIC SHIN GUARDS:** The ballistic shin guards (6) provide the soldier with protection on the front of the leg. The shin guards are attached using two velcro straps.



**SHIELD LIGHT:** The shield light (7) provides illumination the soldier can control from behind the shield. The light has a momentary pressure switch to turn on the light temporary or a flag switch for continuous light.



**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued**

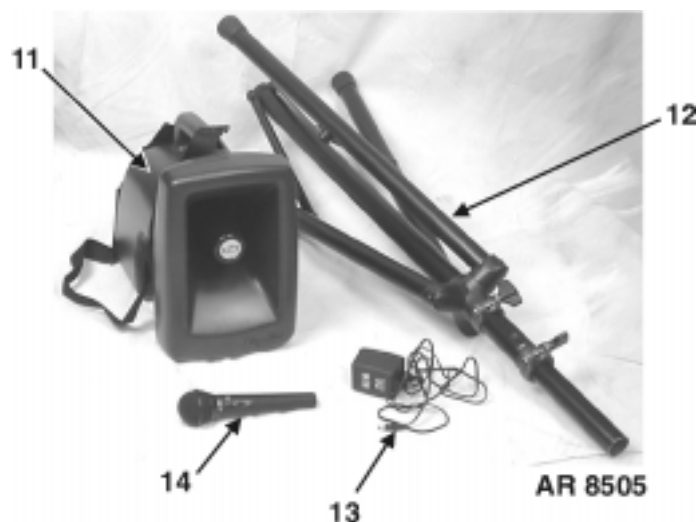
**WOODEN BATON:** The wooden baton (8) provides self-defense for the soldier and the option between physical force and lethal force. The baton comes with a mounting device (9) to attach the baton to a belt.



**PORTABLE BULLHORN:** The portable bullhorn (10) enhances communication over crowd noise. It has a pistol-grip trigger switch for single-handed operation and a built-in siren for emergency situations.



**GROUND MOUNTED BULLHORN, WITH ACCESSORIES:** The ground mounted bullhorn (11) enhances communication over crowd noise. The accessories consist of a tripod (12), a charger (13) and a cordless microphone (14).

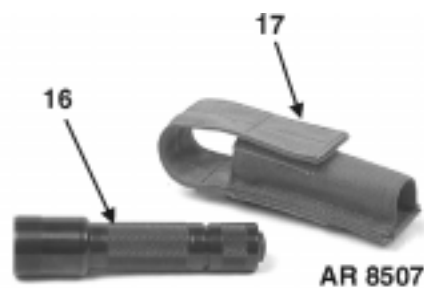


**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued**

**AUDIO FREQUENCY AMPLIFIER:** The audio frequency amplifier (15) provides communication using radios and other devices while wearing a protective mask and conducting crowd control tactics.



**INDIVIDUAL HIGH INTENSITY LIGHT:** The individual high intensity light (16) provides illumination during low-light conditions. The hand-held light can be turned on for temporary or continuous illumination. A pouch (17) is available for carrying the light.

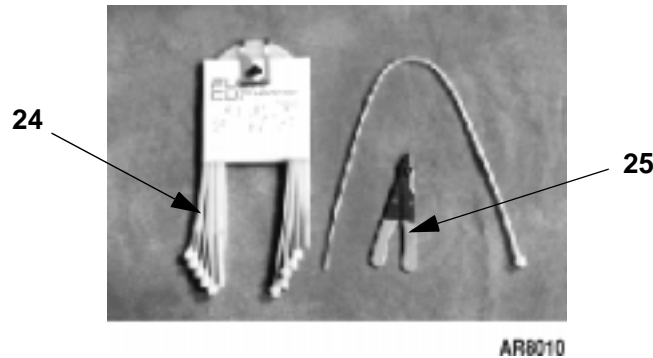


**HIGH INTENSITY LIGHT, WITH ACCESSORIES KIT:** The high intensity light provides illumination for low-light operations. An ON/OFF switch is on the handle of the hand-held light. The light component consists of a waterproof carrying case (18), carrying strap (19), the high intensity light (20), a filter (21), a 10-foot power cord (22), and a charging unit (23).

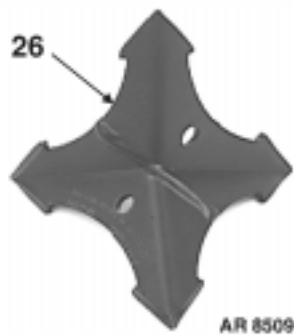


**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued**

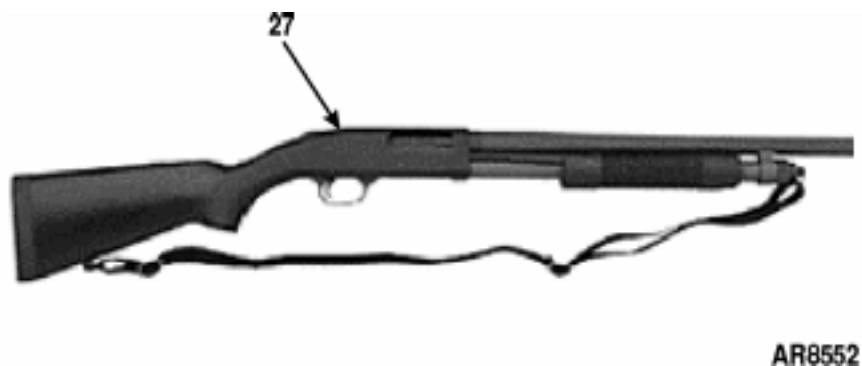
**DISPOSABLE RESTRAINT SYSTEM (DRS):** The Disposable Restraint System (DRS) (24) is used for restraining and controlling individuals or securing weapons. It is a plastic band with a self-locking mechanism at one end. A cutting tool (25) is provided to remove the band.



**CALTROPS:** The caltrops (26) is placed or thrown in the pathway of pedestrians or vehicles to penetrate footwear or tires of a passenger car or an off-road vehicle. It is a light-weight, 3-inch, 4 pronged device made of steel. Several caltrops can be connected together, increasing effectiveness.



**12 GAUGE SHOTGUN:** The 12 gauge shotgun (27) provides an alternative to standard military weapons. The 3-inch chamber allows the use of numerous Government and commercial off-the-shelf lethal and NL munitions.



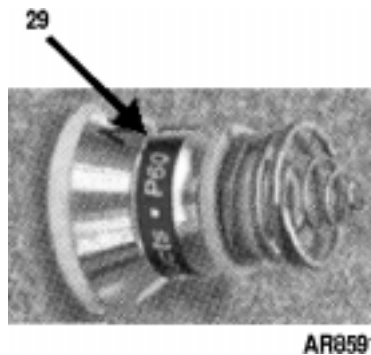


**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued**

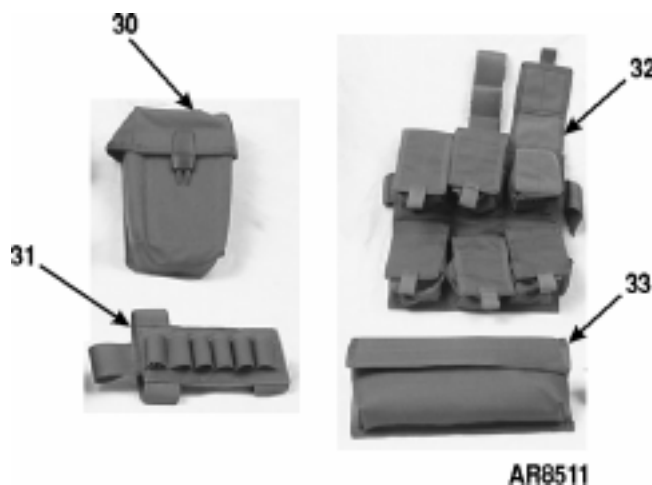
**12 GAUGE SHOTGUN LIGHT:** The high intensity light (28) attaches to a 12 gauge shotgun and provides illumination during low-light conditions. The light can be turned on for temporary or continuous illumination using a pressure switch on the side of the light.



**P60 LAMP:** The P60 lamp (29) provides a replacement lamp for the shield light, the individual high intensity light, and the 12 gauge shotgun light. The lamp has a blue band that designates it is a 6-volt lamp.

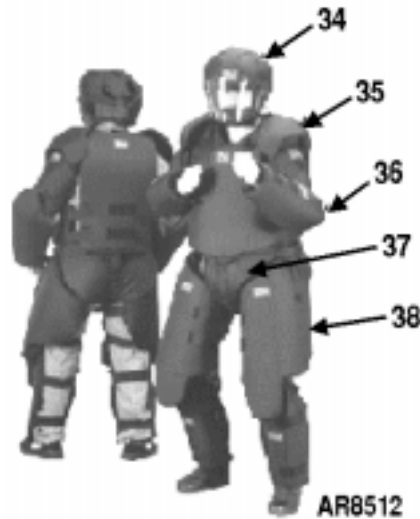


**POUCHES:** Pouches are provided for carrying ammunition. The 12 gauge utility pouch (30) holds 25 rounds for the 12 gauge shotgun and is can be attached to a soldier's combat gear. The 12 gauge buttckuff carrier (31) holds 6 rounds and straps to the stock of a standard military shotgun. The diversionary/rubber ball or flash grenade pouch (32) holds six diversionary device grenades or six sting ball grenades, or a combination of both. It consists of a modular rucksack with six removable compartments and components, each with a velcro fastened flap, and attaches to the leg with buckle straps. The 40mm carry pouch (33) holds 6 rounds of 40mm ammunition and attaches to a soldiers belt. It provides a soldier the ability to carry non-lethal ammunition separate from lethal rounds.



**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued**

RIOT TRAINING SUIT: The riot training suit provides full body protection for the soldier while training for close combat. The suit consists of a helmet (34), chest and back protector (35), biceps and forearm protector (36), groin and buttock protector (37), thigh and shin protector (38), and gloves (not shown). The suit is attached together with velcro and ties.



RIOT TRAINING BAG: The riot training bag (39) is used during the training of soldiers for baton practice.



**LOCATION AND DESCRIPTION OF MAJOR COMPONENTS - Continued****NOTE**

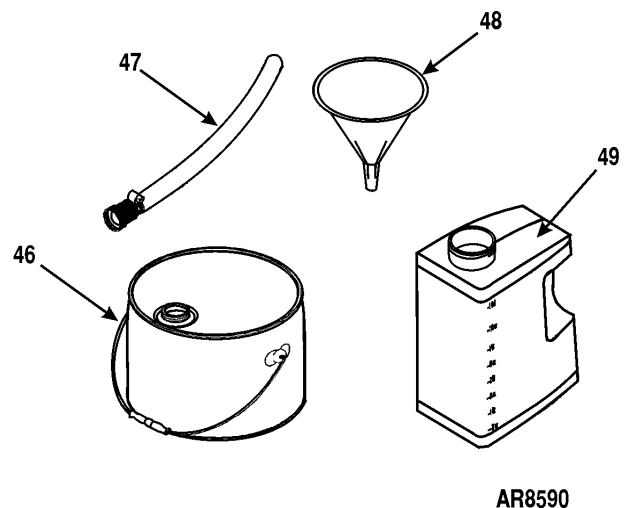
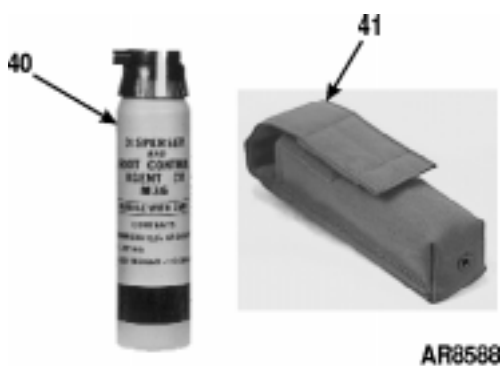
The Riot Control Agent (RCA) dispersers are part of the NLCS, however the descriptive information, operating instructions, troubleshooting procedures and maintenance procedures are in other technical manuals (TM). The referenced TMs must be obtained before using the dispersers.

**RIOT CONTROL AGENT (RCA) DISPERSERS:** RCA dispersers are provided for self defense or to keep rioters out of arms reach of soldiers conducting crowd control tactics or engaged in missions where a noncombatant threat exists. The M36 RCA disperser (40) has a flip top and a pouch (41) is available. The MK4 inert RCA disperser (42) is used for training purposes and a pouch (43) is available. The MK4 simulates the tactical filled M36, but is marked with a green label for inert. The M33A1 RCA disperser (44) consists of a frame and harness assembly, compressed gas cylinder (agent container assembly), air pressure assembly, gun and hose assembly, multi-jet spray unit, and check valve assembly. The M37 RCA disperser (45) is similar to a fire-extinguisher and can be used as a stream or spray. CR solution (46) provides refills for the M33A1 and the M37. The CR solution requires a refill kit consisting of a transfer tube (47), funnel (48) and transfer bottle (49).

For complete information on the M36, see TM 3-1365-204-12.

For complete information on the M33A1, see TM 3-1040-262-13&P.

For complete information on the M37 and the RCA refill unit, see TM 3-1040-287-12&P.

**NOTE**

For complete information on the ammunition in the NLCS, see WP 0043 00.

**EQUIPMENT DATA****NOTE**

All data are approximate.

**NLCS:**

|                  |       |
|------------------|-------|
| NSN.....         | TBD   |
| Part number..... | TBD   |
| CAGEC.....       | 19200 |

**Non-Ballistic Riot Face Shield:**

|                               |                           |
|-------------------------------|---------------------------|
| NSN.....                      | 8465-01-467-0721          |
| Part number.....              | PD/CO-99-14               |
| CAGEC.....                    | 01365                     |
| Model.....                    | DK5H250                   |
| <b>Manufactured Material:</b> |                           |
| Visor.....                    | Polycarbonate             |
| Attachment band.....          | Thermoplastic rubber seal |
| Latch assembly.....           | Thermoplastic             |
| Weight.....                   | 1.5 lb (0.68 kg)          |
| Height.....                   | 8 in.                     |
| Thickness.....                | 0.25 in.                  |
| Cube.....                     | 1320 cu in.; 0.76 cu ft   |
| Packaging.....                | Commercial practices      |
| Packing quantity.....         | 200 per set               |

**Non-Ballistic Riot Body Shield:**

|                               |  |
|-------------------------------|--|
| NSN.....                      | TBD  |
| Part number.....              | PMBS-9   |
| CAGEC.....                    | 0N995  |
| Model.....                    | PAULSON BS-9                                   |
| Outer panel.....              | 24 x 48 in. (61 x 122 cm)                      |
| Shield thickness.....         | .250 in.                                       |
| Weight.....                   | 13.5 lb (6.1 kg)                               |
| Cube.....                     | 6900 cu in.; 4 cu ft                           |
| <b>Manufactured Material:</b> |  |
| Shield.....                   | Transparent polycarbonate                      |
| Handles.....                  | Metal material, covered with non-slip material |
| Impact resistance.....        | 6'2" tent pole, ax or standard riot baton      |
| Packaging.....                | Commercial practices                           |
| Packing quantity.....         | 150 per set                                    |

**Non-Ballistic Riot Shin Guard:**

|                            |   |
|----------------------------|---|
| <b>NSN:</b>                |   |
| Size medium.....           | 8465-01-467-0740                          |
| Size large.....            | 8465-01-467-0744                          |
| Size extra-large.....      | 8465-01-467-0750                          |
| Part number.....           | PD/CO-99-12                               |
| CAGEC.....                 | 01365                                     |
| Manufactured material..... | Polyethylene                              |
| Color.....                 | Black                                     |
| Weight.....                | 2 lb ea (0.9 kg); 4 lb per pair (1.8 kg)  |
| Cube.....                  | 2880 cu in. per pair; 1.67 cu ft per pair |
| Packaging.....             | Commercial practices                      |
| Packing quantity.....      | 150 per set                               |

**EQUIPMENT DATA - Continued****Ballistic Face Shield:**

|                             |                         |
|-----------------------------|-------------------------|
| NSN.....                    | 8470-01-467-0754        |
| Part number .....           | PD/CO-99-15             |
| CAGEC .....                 | 01365                   |
| Model .....                 | 702MT                   |
| Manufactured material ..... | Polycarbonate           |
| Weight .....                | 3.4 lb (1.54 kg)        |
| Cube .....                  | 2160 cu in.; 1.25 cu ft |
| Visor:                      |                         |
| Manufactured material ..... | Molded polycarbonate    |
| Dimensions (approx) .....   | 6 x 15 in.              |
| Packaging .....             | Commercial practices    |
| Packing quantity .....      | 10 per set              |

**Ballistic Body Shield:**

|                             |  |
|-----------------------------|--|
| NSN.....                    | 8470-01-467-0757                         |
| Part number .....           | PD/CO-99-17                              |
| CAGEC .....                 | 01365                                    |
| Model .....                 | PT2237                                   |
| Manufactured material ..... | Spectra shield bullet resistant material |
| Finish.....                 | Anti-glare matte finish                  |
| Weight .....                | 18 lb                                    |
| Cube .....                  | 4968 cu in.; 2.88 cu ft                  |
| Dimensions .....            | 20 x 36 in.                              |
| Viewport .....              | 4 x 16 in.                               |
| Packaging .....             | Commercial practices                     |
| Packing quantity .....      | 10 per set                               |

**Ballistic Shin Guard:**

|                             |   |
|-----------------------------|---|
| NSN:                        |   |
| Size medium .....           | TBD   |
| Size large .....            | TBD   |
| Size extra-large .....      | TBD   |
| Part number .....           | PT1220  |
| CAGEC .....                 | 0N995   |
| Model .....                 | TBD   |
| Manufactured material ..... | Kevlar MK2                                    |
| Weight (per pair) .....     | 7-10 lb                                       |
| Cube .....                  | 2880 cu in. (per pair); 1.67 cu ft (per pair) |
| Packaging .....             | Commercial practices                          |
| Packing quantity .....      | 10 per set                                    |

**Shield Light:**

|                        |                  |
|------------------------|------------------|
| NSN.....               | TBD              |
| Part number .....      | SF6SL            |
| CAGEC .....            | 0N995            |
| Model .....            | 6SL              |
| Light output.....      | 65 lumens        |
| Lamp .....             | SFP60            |
| Run time.....          | Approx 1 hr      |
| Battery type .....     | 2 3-volt lithium |
| Battery storage .....  | 5 to 10 yr       |
| Packing quantity ..... | 10 per set       |

**EQUIPMENT DATA - Continued****Wooden Baton:**

|                       |                 |
|-----------------------|-----------------|
| NSN.....              | TBD             |
| Part number .....     | MON2800         |
| CAGEC .....           | 0N995           |
| Model .....           | N/A             |
| Weight .....          | Less than 35 oz |
| Length .....          | 36 in.          |
| Handle diameter ..... | 1.25 in.        |
| Packing quantity..... | 200 per set     |

**Portable Bullhorn:**

|                             |                |
|-----------------------------|----------------|
| NSN.....                    | TBD            |
| Part number .....           | AT1A2M         |
| CAGEC .....                 | 0N995          |
| Model .....                 | ABLE-2         |
| Weight (w/o batteries)..... | 3.5 lb         |
| Cube .....                  | 0.87 cu ft     |
| Length .....                | 14.5 in.       |
| Bell diameter.....          | 9 in.          |
| Battery type.....           | 8 dry cell "C" |
| Acoustic range .....        | 3/4 to 1 mile  |
| Power output .....          | 15 to 20 watts |
| Packing quantity.....       | 10 per set     |

**Ground Mounted Bullhorn:**

|                               |   |
|-------------------------------|---|
| Contains .....                | Bullhorn, wireless microphone, tripod, charger, carrying case |
| NSN.....                      | TBD   |
| Part Number:                  |   |
| Bullhorn.....                 | AAPPB35W1   |
| Microphone .....              | AAPBWH10001   |
| Tripod .....                  | AASS450   |
| CAGEC .....                   | 0N995   |
| Model .....                   | MEGA VOX PA SYTEM   |
| Weight .....                  | 15 lb (6.8 kg)  |
| Dimensions .....              | 13.75 x 9 x 14.75 in. (35 x 23 x 37 cm)                       |
| Battery Type:                 |   |
| Bullhorn.....                 | 12-volt rechargeable, 4.0 AH, sealed lead acid                |
| Microphone .....              | 1 AA, alkaline  |
| Rated power output .....      | 22 watts  |
| Max SPL @ rated power.....    | 126 dB @ 1 m  |
| Frequency response.....       | 400 Hz - 10 kHz   |
| Mic 1 input.....              | LoZ, unbalanced, 1/4 in.-phone                                |
| Mic 2 input.....              | LoZ, unbalanced, 1/4 in.-phone                                |
| Line input .....              | Hi-Z, unbalanced, 1/4 in.-phone                               |
| Line output (post fader)..... | Lo-Z, 1/4 in. phone   |
| Speaker output .....          | 8 ohms, unswitched, 1/4 in. phone                             |
| Operation time .....          | 3 to 12 hrs (depending on use)                                |
| Range .....                   | Up to 200 yd  |
| Charger (RC-16) .....         | 16 volts AC, 1.5A, 60 Hz                                      |
| Charging time.....            | Approx 8 hr   |
| Tripod:                       |   |
| Center tube .....             | 1-1/2 in.   |
| Weight limit .....            | Approx 110 lb (50 kg) of properly installed equipment         |
| Packing quantity.....         | 8 per set   |

**EQUIPMENT DATA - Continued****Amplifier, Audio Frequency:**

|                        |                  |
|------------------------|------------------|
| NSN.....               | 5996-01-381-9012 |
| Part number .....      | 1000-3028        |
| CAGEC .....            | 61318            |
| Model .....            | M7               |
| Used with .....        | M40 mask         |
| Battery type .....     | 9-volt, alkaline |
| Frequency .....        | 20 kHz and below |
| Packing quantity ..... | 200 per set      |

**Individual High Intensity Light:**

|                              |                  |
|------------------------------|------------------|
| NSN.....                     | TBD              |
| Part number .....            | SF6P             |
| CAGEC .....                  | 0N995            |
| Model .....                  | 6P               |
| Weight (w/o batteries) ..... | 5 oz             |
| Cube .....                   | 0.03 cu ft       |
| Length .....                 | 4.9 in.          |
| Battery:                     |                  |
| Type .....                   | 2 3-volt lithium |
| Run time .....               | 60 min           |
| Output .....                 | 65 lumens        |
| Lamp .....                   | SFP60            |
| Packing quantity .....       | 15 per set       |

**Carry Pouch (for Individual High Intensity Light):**

|                        |                 |
|------------------------|-----------------|
| NSN.....               | TBD             |
| Part number .....      | ATIEATAVLFP6POD |
| CAGEC .....            | 0N995           |
| Packing quantity ..... | 15 per set      |

**High Intensity Light:**

|                                  |  |
|----------------------------------|--|
| Contains .....                   | Light, 12-volt charging unit w/10 in. cord w/lighter end, 10-foot power cord, carrying strap, filter, waterproof carrying case |
| NSN.....                         | TBD  |
| Part number .....                | XENNCUSA   |
| CAGEC .....                      | 0N995  |
| Model .....                      | 70-6004 NIGHT HUNTER   |
| CAGEC .....                      | 1KGM2  |
| Length .....                     | 13 in.   |
| Diameter .....                   | 5 in.  |
| Weight .....                     | 9.5 lb   |
| Filter .....                     | 850 nm near-infrared   |
| Lens .....                       | Clear tempered glass, filters out UV radiation   |
| Lamp:                            |  |
| Type .....                       | Xenon short-arc  |
| Life (approx) .....              | 500 hr   |
| Battery:                         |  |
| Type .....                       | 12 VDC, thinline, sealed lead  |
| Rating .....                     | 20 VDC, 5A   |
| Recharging time .....            | 4 hr   |
| Recharging cycles (approx) ..... | 500  |
| Power cable connector .....      | 6 ft w/male vehicle lighter adapter  |

**EQUIPMENT DATA - Continued****High Intensity Light - Continued:****Power Output (internal power):**

Peak power ..... 40 min continuous use; 45 min intermittent use  
 Low power ..... 1 hr continuous use; longer for intermittent use

**Input Voltage (external power):**

Operation ..... 12, 24, 28 VDC  
 Charging ..... 12, 24, 28 VDC

Beam ..... 1 to 15 degrees spread; 1900 yd

Packing quantity ..... 20 per set

**Temperature Limits:**

Operation ..... -4° to 122° F  
 Charging ..... 32° to 104° F  
 Storage ..... -4° to 104° F

**Replacement Bulb:**

Model ..... SFP60  
 Packing quantity ..... 8 per set

**Disposable Restraint System (DRS):**

NSN ..... TBD  
 Part number ..... NIKFLEXCUFF  
 CAGEC ..... 0N995  
 Width ..... 1/2 in.  
 Packaging:  
 Weight ..... 28 lb  
 Cube ..... 1.8 cu ft  
 Packing quantity ..... 1,000 DRS per set; 2 cutters per set

**Caltrops:**

NSN ..... TBD  
 Part number ..... ATIRSC3  
 CAGEC ..... 0N995  
 Weight ..... 0.33 lb  
 Cube ..... 0.002 cu ft  
 Dimension ..... 3 in.  
 Material ..... Steel  
 Penetration ..... Passenger car or off-road vehicle; most shoes or sandals  
 Packaging:  
 Quantity ..... 100  
 Weight ..... 33 lb  
 Cube ..... 0.222 cu ft  
 Packing quantity ..... 250 per set

**12 Gauge Shotgun:**

NSN ..... 1005-01-295-1832  
 Part number ..... 50518  
 CAGEC ..... 41758  
 Model ..... MOSSBERG 500  
 Chamber ..... 3 in.  
 Packing quantity ..... 50 per set



**EQUIPMENT DATA - Continued****12 Gauge Shotgun Light:**

|                        |                  |
|------------------------|------------------|
| NSN.....               | TBD              |
| Part number .....      | SF622            |
| CAGEC .....            | 0N955            |
| Model .....            | SF622            |
| Lamp .....             | SFP60            |
| Battery type .....     | 2 3-volt lithium |
| Packing quantity ..... | 50 per set       |

**SFP60 Lamp:**

|                        |   |
|------------------------|---|
| Used with .....        | Shield light, individual high intensity light, 12 gauge shotgun light |
| NSN.....               | TBD   |
| Part number .....      | SFP60   |
| CAGEC .....            | 0N995   |
| Model .....            | SFP60   |
| Band .....             | Blue, w/words "6v...P60"  |
| Type .....             | 6-volt  |
| Output .....           | 65 lumens   |
| Packing quantity ..... | 15 per set  |

**12 Gauge Utility Pouch (25 Round):**

|                        |  |
|------------------------|--|
| NSN.....               | TBD  |
| Part number .....      | ATIEAUPMS  |
| CAGEC .....            | 0N995  |
| Weight .....           | 1.5 lb   |
| Cube .....             | 0.208 cu ft  |
| Material .....         | Woodland camouflage, water repellant coated fabric |
| Packing quantity ..... | 50 per set   |

**12 Gauge Buttcraft Carrier (6 Round):**

|                        |  |
|------------------------|--|
| NSN.....               | TBD  |
| Part number .....      | ATISSCQTR  |
| CAGEC .....            | 0N995  |
| Weight .....           | 0.5 lb   |
| Cube .....             | 0.016 cu ft  |
| Material .....         | Woodland camouflage, water repellant coated fabric |
| Packing quantity ..... | 50 per set   |

**Diversionary/Rubber Ball or Flash Grenade Pouch:**

|                        |  |
|------------------------|--|
| NSN.....               | TBD  |
| Part number .....      | ATISASSDD60D                                       |
| CAGEC .....            | 0N995  |
| Material .....         | Woodland camouflage, water repellant coated fabric |
| Packing quantity ..... | 25 per set   |

**40mm Carrying Pouch:**

|                        |  |
|------------------------|--|
| NSN.....               | TBD  |
| Part number .....      | ATIEA40MM6   |
| CAGEC .....            | 0N995  |
| Weight .....           | 0.5 lb   |
| Cube .....             | 0.094 cu ft  |
| Material .....         | Woodland camouflage, water repellant coated fabric |
| Packing quantity ..... | 100 per set  |

**EQUIPMENT DATA - Continued****Riot Training Suit:**

|                       |   |
|-----------------------|---|
| Contains .....        | Chest and back protector, biceps and forearm protectors, groin and buttock protector, thigh and shin protectors, helmet, gloves and carry bag |
| NSN.....              | TBD   |
| Part number .....     | AAT1FS333   |
| CAGEC .....           | 0N995   |
| Material .....        | DuPont Cordura Nylon  |
| Weight .....          | 15 lb   |
| Cube .....            | 10.8 cu ft  |
| Size .....            | Fits a 5'11" 185 lb person  |
| Packing quantity..... | 4 per set   |

**Riot Training Bag:**

|                       |             |
|-----------------------|-------------|
| NSN.....              | TBD         |
| Part number .....     | MONUTB      |
| CAGEC .....           | 0N995       |
| Weight .....          | 4 lb        |
| Cube .....            | 3.055 cu ft |
| Packing quantity..... | 10 per set  |

**M36 RCA Disperser:****NOTE**

For complete equipment data on the M36 RCA disperser, see TM 3-1365-204-12.

|                           |  |
|---------------------------|--|
| NSN.....                  | 1365-00-283-9046   |
| Part number .....         | C116-6-271   |
| CAGEC .....               | 81361  |
| Model .....               | M36  |
| Weight .....              | 0.25 lb (110 ± 2 g)                                      |
| Height.....               | 6 in.  |
| Diameter.....             | 1.5 in.  |
| Circumference .....       | 3.9 in.  |
| Cube .....                | 0.02 cu ft   |
| Performance:              |  |
| Maximum range .....       | 10 to 12 ft in target specific stream                    |
| Delivery .....            | 15 to 25 1-sec bursts; 14 to 24 sec of continuous stream |
| Minimum temperature ..... | -30° F   |
| Packaging:                |  |
| Quantity .....            | 200  |
| Weight.....               | 50 lb  |
| Cube.....                 | 3.2 in.  |
| Packing quantity.....     | 200 per set  |

**Carry Pouch (for M36 and MK4 Dispersers):**

|                       |             |
|-----------------------|-------------|
| NSN.....              | TBD         |
| Part number .....     | ATIEAMKK    |
| CAGEC .....           | 0N955       |
| Packing quantity..... | 200 per set |

**EQUIPMENT DATA - Continued****MK4 Inert RCA Disperser:**

|                       |  |
|-----------------------|--|
| NSN.....              | TBD  |
| Part number .....     | MK-4 INERT TRAINING UNIT   |
| CAGEC .....           | 0N995  |
| Model .....           | MK4  |
| Weight .....          | 0.5 lb   |
| Height.....           | 6.25 in.   |
| Cube .....            | 0.02 cu ft   |
| Label .....           | Green for INERT  |
| Performance .....     | 19 1-sec bursts  |
| Ingredients.....      | Propylene Glycol USP, special denatured alcohol 40B, distilled water,<br>nitrogen (propellant) |
| Packing quantity..... | 200 per set  |

**M33A1 RCA Disperser:****NOTE**

For complete equipment data on the  
M33A1 RCA disperser, see TM 3-  
1040-262-13&P.

|                       |  |
|-----------------------|--|
| Contains .....        | Frame and harness assembly, compressed gas cylinder (agent container<br>assembly), air pressure assembly, gun and hose assembly, multi-jet<br>spray unit, and check valve assembly |
| NSN.....              | 1040-00-148-9824   |
| Part number .....     | E116-3-121   |
| CAGEC .....           | 81361  |
| Model .....           | M33A1  |
| Height.....           | 9.15 in.   |
| Diameter.....         | 2.5 in.  |
| Circumference .....   | 7.85 in.   |
| Performance:          |  |
| Maximum range .....   | 25 ft  |
| Delivery .....        | 25 half-second bursts  |
| Packing quantity..... | 4 per set  |

**M37 RCA Disperser:****NOTE**

For complete equipment data on the  
M37 RCA disperser, see TM 3-1040-  
287-12&P.

|                       |                          |
|-----------------------|--------------------------|
| NSN.....              | 1040-01-463-0157         |
| Part number .....     | 116-3-160                |
| CAGEC .....           | 81361                    |
| Model .....           | M37                      |
| Weight (filled) ..... | 8 lb                     |
| Cube .....            | 0.76 cu ft               |
| Performance:          |                          |
| Maximum range .....   | 9 m                      |
| Delivery .....        | 16 to 18 3-second bursts |
| Packing quantity..... | 15 per set               |

---

**EQUIPMENT DATA - Continued**

CR Solution RCA:

**NOTE**

For complete equipment data on the  
RCA refill kit, see TM 3-1040-287-  
12&P.

|                       |  |
|-----------------------|--|
| Used for.....         | M33A1 and M37                              |
| NSN.....              | 1365-01-072-3688                           |
| Part number.....      | EA-R-1136                                  |
| CAGEC.....            | 81361                                      |
| Model.....            | MK46                                       |
| Weight.....           | 5 lb                                       |
| Cube.....             | 0.25 cu ft                                 |
| Filler.....           | 3 gal CR solution                          |
| Refill kit.....       | Transfer tube, transfer bottle, and funnel |
| Packing quantity..... | 60 gal per set (20 3-gal bottles)          |

Ammunition:

**NOTE**

For complete equipment data on the  
ammunitions in the NLCS, see WP  
0043 00.

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**THEORY OF OPERATION**

---

## **GENERAL**

The Non-Lethal Capability Set (NLCS) gives Army units conducting Stability and Support Operations (SASO) anywhere in the world a prepositioned single source from which to draw non-lethal items and ammunition to enhance force protection and reduce noncombatant casualties in accordance with the established rules of engagement (ROE) for that mission in support of the theater and national objectives. The Army NLCS enhances the commander's force options throughout the full range of peace and conflict operations. The set is configured to outfit 200 soldiers with NL munitions/weapons, protective equipment, and additional equipment that can augment the NL capabilities of a unit's support elements and assigned vehicles.

While the NLCS is designed to counter a variety of threats, its primary focus is on counter personnel capabilities and area denial to unauthorized personnel and vehicles. NL items are ideally suited for use against noncombatants, whose presence or acts jeopardize a unit's ability to accomplish its assigned mission. Any time the threat may not justify the use of deadly force options, NL components enable soldiers to engage these forces with the reasonable expectation of minimizing serious non-combatant casualties. NL confrontations however, can become lethal quickly and unexpectedly and should never be used without some kind of lethal force overwatch.

Set contents are divided into four distinct categories: Individual Protective Equipment, Weapons, Enhancement Devices, and Training Devices/Ammunition Allocations.

### **Individual Protective Equipment**

Use personnel protective equipment such as ballistic or non-ballistic face and body shields and shin/knee guards for Civil Disturbance (CD) operations.

### **Weapons**

Use munitions such as the 40mm NL point and area target cartridges on unit's assigned weapons for crowd control. Employ as necessary unique NL weapons such as shotguns, riot batons, Riot Control Agents (RCA) dispersers and restraining devices.

### **Enhancement Devices**

Increase command and control capabilities with devices like bullhorns, voice-amplifying devices for protective masks and high intensity light devices. Use other devices to augment access control or checkpoint operations.

### **Training Devices/Ammunition Allocation**

Use training ammunition to conduct live fire qualification or familiarization for each NL ammunition type. Practice using non-munition weapons such as batons with face and body shields and batons with training suit and bag.

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**CHAPTER 2**

**OPERATOR INSTRUCTIONS**  
**FOR**  
**NON-LETHAL CAPABILITY SET**

**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**

**DESCRIPTION AND USE OF CONTROLS AND INDICATORS**

---

**NON-LETHAL CAPABILITY SET**

The Non-Lethal Capability Set does not have controls and indicators. The ground mounted bullhorn is the only component in the set that has controls and indicators (see WP 0014 00).

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**NON-BALLISTIC RIOT FACE SHIELD**  
**OPERATION UNDER USUAL CONDITIONS**

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**INITIAL SETUP:**

**Equipment Conditions**

Helmet

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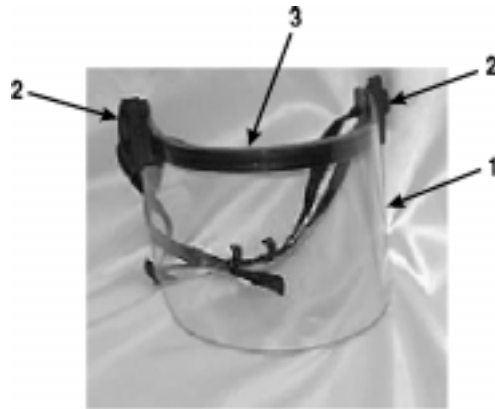
**ASSEMBLY AND PREPARATION FOR USE**

**CAUTION**

Shields are made from exceptionally strong and impact resistant polycarbonate plastic. Exposure to gasoline and similar hydrocarbon solvents however will damage the plastic and eventually the shield will fail and crack. It is essential to follow proper handling and storage instructions for polycarbonate plastic and avoid any exposure to gasoline, diesel, solvents, or chemicals.

If an operational shield is damaged or contaminated, do not use for operations. Mark and turn in as defective.

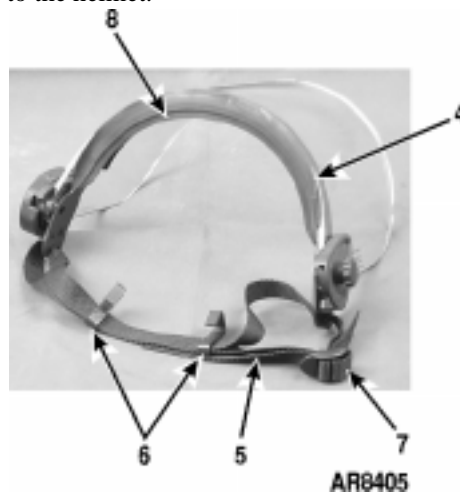
1. Attach non-ballistic face shield to helmet.
2. The non-ballistic face shield consists of a movable polycarbonate protection visor (1) connected by two hinges (2) to a visor attachment assembly (3).



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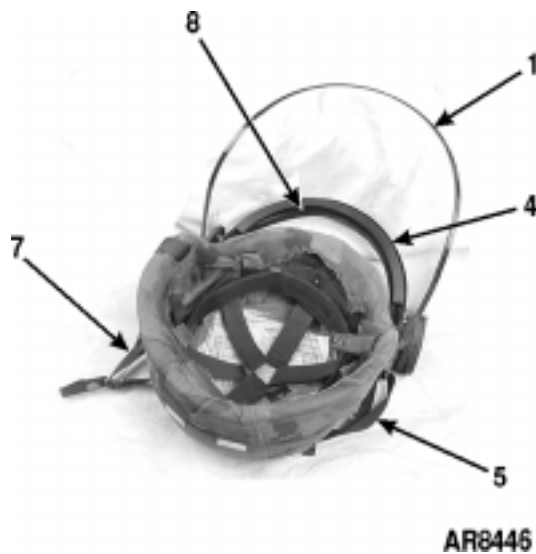
**ASSEMBLY AND PREPARATION FOR USE - Continued**

3. The visor attachment assembly has a thermoplastic attachment band (4) and webbed strap (5) with two J hooks (6) and an adjustment buckle (7) for securing it to the helmet.

**NOTE**

Make sure the visor is in the down position on the attachment band.

4. Using the adjustment buckle (7), loosen the webbed strap (5) to its fullest extent without detaching it from the attachment band (4).
5. Turn helmet upside down with brim facing away.



6. Orient the visor attachment assembly (4) so that the visor (1) is facing up and toward the front of the helmet and the webbed strap (5) is to the back of the helmet.
7. Engage front edge of helmet brim into the grooved lip (8) on the inside of the attachment band (4).

**ASSEMBLY AND PREPARATION FOR USE - Continued****NOTE**

Keep attachment band centered on the helmet brim for proper operation.

8. Slide two J hooks (6) so that they are 3 inches on either side of center of the strap (5).
9. Engage J hooks to the back underside edge of helmet.
10. Using adjustment buckle (7), tighten webbed strap (5) until secure.

**NOTE**

During tightening, keep the attachment band centered on the helmet brim.

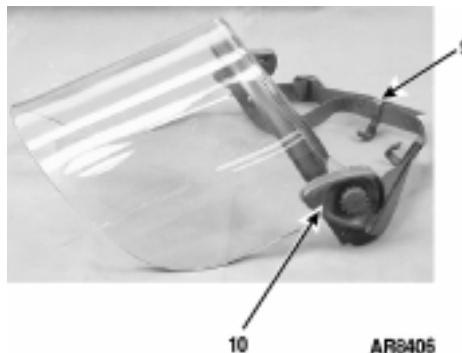
Ensure that the band seal lip mates smoothly with helmet brim and does not become folded or twisted along brim edge.

11. Fold and secure excess strap end using the J hook loops (9).

**NOTE**

Ensure that webbed strap lies neatly against helmet.

12. One hinge has a latch mechanism (10) that secures the visor in either the raised or lowered position. The latch mechanism can be installed on either the right or left hinge to accommodate right or left handed- personnel by unscrewing the latch hinge mechanism retaining screw knob and switching it with non-latch hinge mechanism. The tab on the latch mechanism must be pressed to release and move visor from the up or down position.



13. Raise and lower visor to test for proper attachment.

**NOTE**

The visor will not rub against exterior of helmet when raised or lowered with a properly centered and secured attachment band.

**OPERATING PROCEDURE****WARNING**

When visor is in down position, ensure forward edge of seal contacts visor to prevent seepage of liquids between visor and helmet which could harm wearer.

1. Press the tab on the latch hinge (10) with hand to release visor before raising or lowering it using the same hand. Latch hinge will engage and lock visor in either the up or down position.

**NOTE**

Visor latch mechanism is designed to release and allow visor to move if struck by a heavy solid object to minimize serious head and neck injuries to personnel

2. Place face shield in the down or deployed position for maximum protection during non-ballistic confrontations.

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**NON-BALLISTIC RIOT BODY SHIELD**  
**OPERATION UNDER USUAL CONDITIONS**

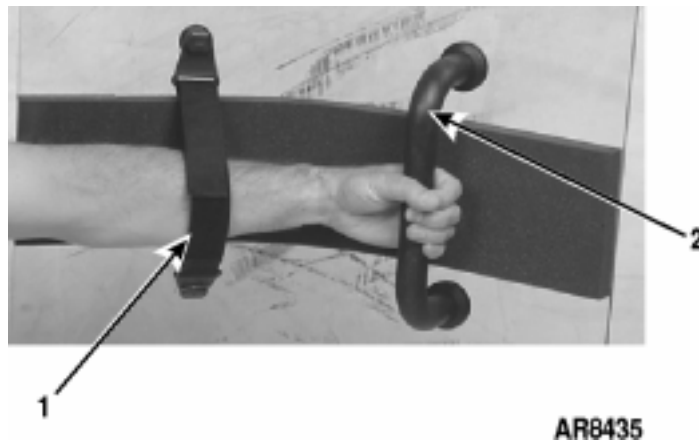
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**INITIAL SETUP:**

None

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**OPERATING PROCEDURES**



**WARNING**

Overtightening forearm strap can cut off blood circulation.

**CAUTION**

Shields are made from exceptionally strong and impact resistant polycarbonate plastic. Exposure to gasoline and similar hydrocarbon solvents however will damage the plastic and eventually the shield will fail and crack. It is essential to follow proper handling and storage instructions for polycarbonate plastic and avoid any exposure to gasoline, diesel, solvents, or chemicals.

If an operational shield is damaged or contaminated, do not use for operations. Mark and turn in as defective.

1. Loosen adjustable forearm strap (1) by unfastening velcro.
2. Insert arm through forearm strap loop and grasp handle (2) firmly.
3. Adjust forearm strap (1) with velcro so that forearm supports side of shield opposite handle (2).
4. When used with the face shield and shin guards, the body shield provides the warfighter with maximum frontal protection when engaged in various hostile civil and crowd control situations.

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**NON-BALLISTIC RIOT SHIN GUARDS**  
**OPERATION UNDER USUAL CONDITIONS**

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**INITIAL SETUP:**

None

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**ASSEMBLY AND PREPARATION FOR USE**

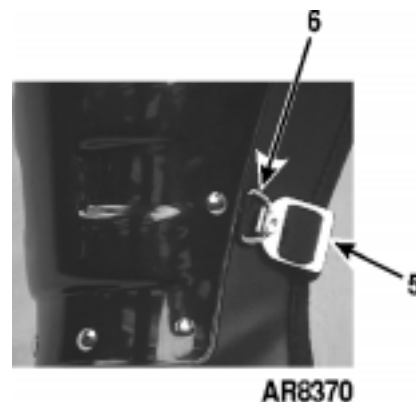
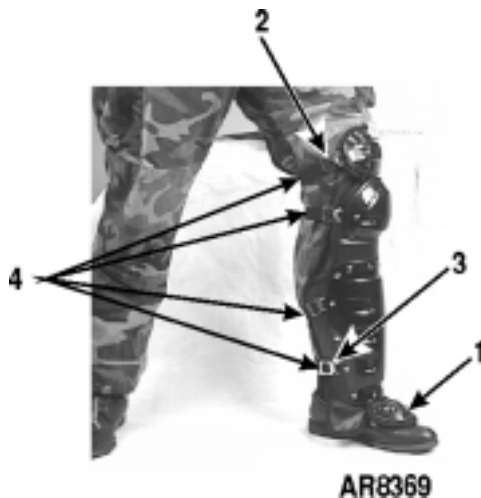
**WARNING**

Do not overtighten straps. Blood flow restriction could occur.

**NOTE**

The non-ballistic shin guards can be used on the right shin or the left shin.

1. Place the shin guard over the shin with the toe instep protector (1) over the foot.
2. Starting with the top knee strap (2) and moving down to the ankle strap (3), fasten the four straps (4) by wrapping each strap around the back of the leg and hooking the metal strap end (5) to the metal loop (6).



3. Check for normal flexibility at knee and ankle joints. Adjust straps (4), if necessary.

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**BALLISTIC FACE SHIELD**  
**OPERATION UNDER USUAL CONDITIONS**

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**INITIAL SETUP:**

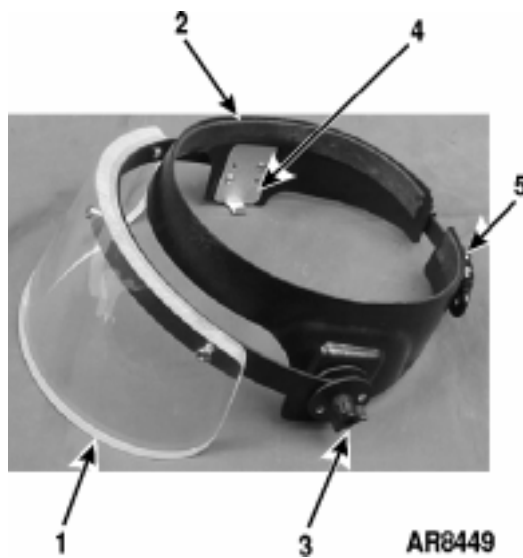
**Equipment Conditions**

Helmet

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**ASSEMBLY AND PREPARATION FOR USE**

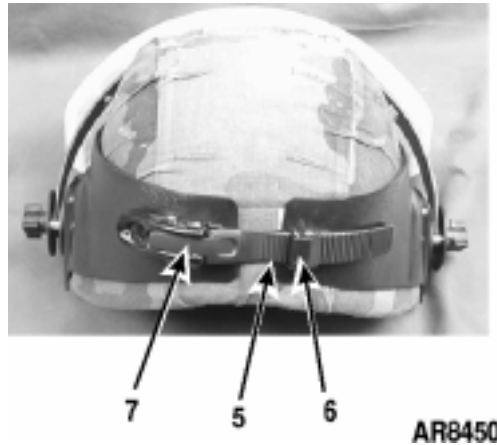
1. Attach ballistic face shield to helmet.
2. The ballistic face shield assembly consists of a thick bullet resistant acrylic shield (1) capable of providing the warfighter with Level IIIA protection against 9mm and .44 magnum pistol rounds connected to an adjustable helmet attachment band (2) by two movable hinges (3).



3. The helmet attachment band (2) has two hand adjustable friction hinges (3), two metal helmet retaining clips (4) one on each side and a fit-adjusting strap (5) across the back.

**ASSEMBLY AND PREPARATION FOR USE - Continued**

4. The fit-adjusting strap (5) has a size adjustment clip (6) and a locking tensioner clamp (7).

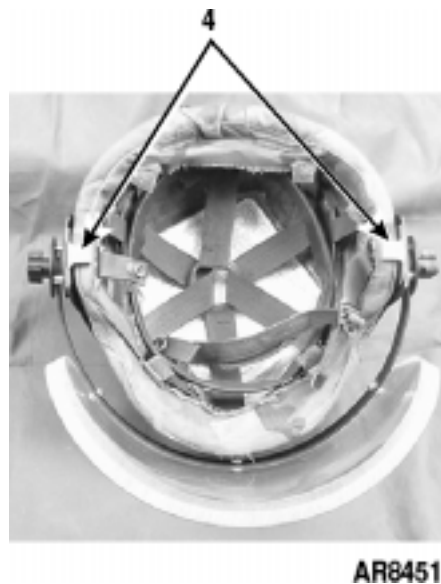


5. Lift up to release tensioner clamp (7) .
6. Lift up to unfasten size adjustment clip (6) and extend strap (5) out to its maximum open length.
7. Slide face shield assembly over helmet.

**NOTE**

Keep face shield and attachment band centered with front of helmet during installation.

8. Hook two metal retaining clips (4), one on each side, to side edges of helmet.



9. Using the fit-adjusting strap (5), take slack out of helmet attachment band (2) until it lays against the helmet. Press the size adjustment clip (6) until strap is secure.
10. Press down and engage the tensioner clamp (7) until it locks.

**ASSEMBLY AND PREPARATION FOR USE - Continued****NOTE**

Check to make sure face shield assembly is centered and securely attached to helmet.

**OPERATING PROCEDURES**

1. Adjust the two friction tension hinges (3) by turning knobs clockwise just until the face shield will remain in the up position without holding yet still can be moved to the down or up positions.
2. When in the down position and used with the ballistic body shield and shin guards, the ballistic face shield provides the warfighter with frontal ballistic protection when engaged in various hostile civil and crowd control situations.

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**BALLISTIC BODY SHIELD**  
**OPERATION UNDER USUAL CONDITIONS**

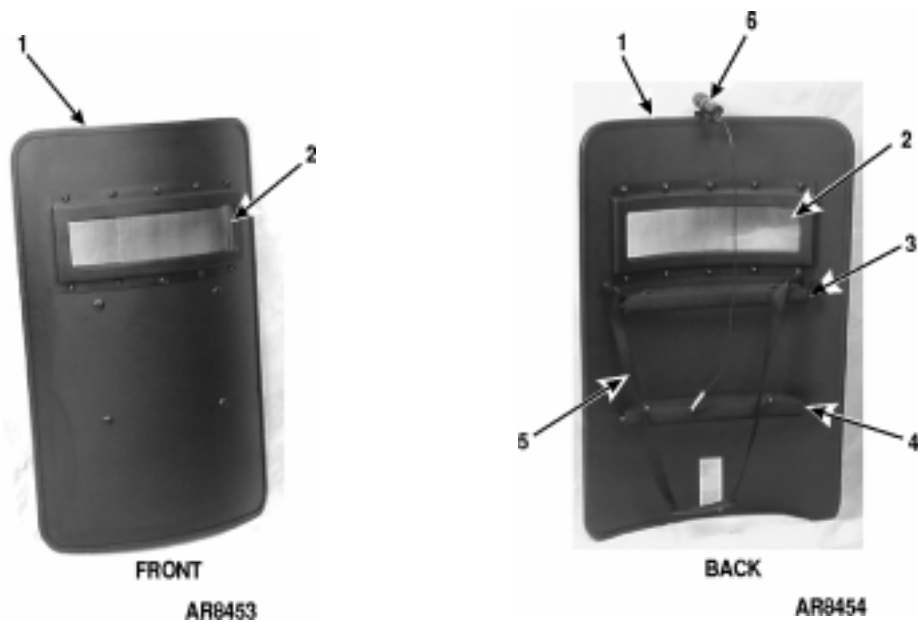
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**INITIAL SETUP:**

**Tools and Special Tools**

Screwdriver, flat tip  
Wrench, hexagonal  
Pliers

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1. The ballistic body shield (1) is made from a slightly curved 20 inch wide by 36 inch high (61 cm by 91 cm) bullet resistant material (Spectra Shield) painted anti-reflexive flat black capable of providing Level III protection against 9mm and .44 Magnum pistol rounds.
2. Towards the top of the shield is a 4 inch high by 16 inch wide (10 cm by 33 cm) viewport (2).
3. On the back beneath the viewport are two parallel padded bars: one upper bar (3) and one lower bar (4).
4. A neck and shoulder carrying strap (5) is attached to the ends of the upper bar.

## ASSEMBLY AND PREPARATION FOR USE

### **WARNING**

Ensure bolts do not protrude more than 0.125 inches to prevent injury to personnel.

1. The Ballistic Body Shield components (handles (3) (4), carrying strap (5) and viewport (2) housing ) are assembled and disassembled using nuts and bolts with a standard flat screwdriver and hexagonal wrench or pliers.
2. High intensity light (s) (6) can be mounted on shield as required in accordance with WP 0011 00.

## OPERATING PROCEDURES



1. Place neck and shoulder carrying strap (5) over head.

### **NOTE**

Depending upon the mission, the ballistic body shield can be held and supported with one or both hands.

2. If using one hand, grasp the upper padded bar (3) with non-fighting hand (hand without weapon, tear gas, etc) palm up, from beneath, wrapping thumb around front and fingers around back of bar.
3. Lift and support weight of shield using back of forearm and elbow.
4. Two hand operation requires the use of both hands at the same time, one on the upper bar (3) and one on the lower bar (4) to hold shield up so that viewport (2) is at eye level.

### **NOTE**

Soldiers may be at a tactical disadvantage when using the Ballistic Body Shield if they are not properly trained.

5. Soldiers should practice carrying the body shield during team movement and while shooting a weapon.
6. Since using a body shield requires non-traditional shooting positions, soldiers should practice shooting in both stationary and moving positions while carrying a body shield.
7. Used with the ballistic face-shield and shin guards, the ballistic body shield provides the warfighter with frontal ballistic body protection when engaged in various civil and crowd control situations.

## END OF WORK PACKAGE

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**BALLISTIC SHIN GUARDS**  
**OPERATION UNDER USUAL CONDITIONS**

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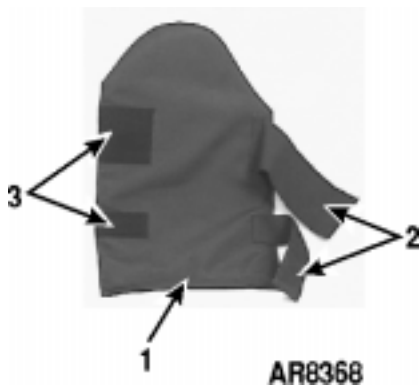
**INITIAL SETUP:**

None

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**ASSEMBLY AND PREPARATION FOR USE**

1. Place the shin guard over the shin with the straight end (1) resting on the ankle and the two straps (2) on the inside of the leg.
2. Wrap each strap (2) around the back of the leg and attach to the velcro (3).



**WARNING**

Do not overtighten straps. Blood flow restriction could occur.

3. Check for normal flexibility, adjusting straps (2) if necessary.

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**SHIELD LIGHT**  
**OPERATION UNDER USUAL CONDITIONS**

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**INITIAL SETUP:****Tools and Special Tools**

Hex wrench

**Materials/Parts**

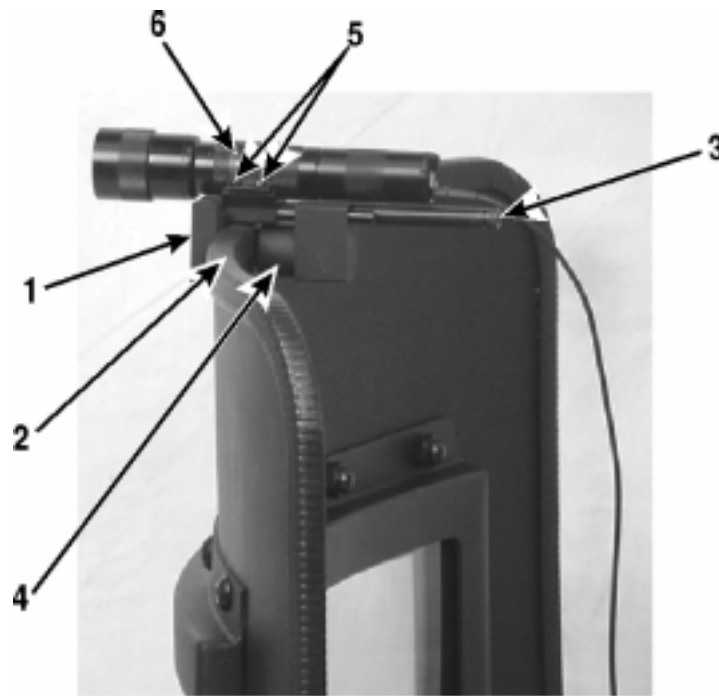
Battery, lithium, DL123A; or Battery Pack, lithium, DL223A

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**ASSEMBLY AND PREPARATION FOR USE****NOTE**

This item can be mounted on either the ballistic or non-ballistic body shield. More than one light kit may be used on the body shield, depending on the amount of light required.

1. Place mount (1) over top of body shield (2) and position in place.
2. Tighten the hex head screw (3) with hex wrench provided.
3. If the shield is more than 3/4-inch thick, move the switch and slider assembly (4) back by loosening the two screws (5) holding the ring cap (6), pushing it back and then retightening the screws.

**AR8407**

**ASSEMBLY AND PREPARATION FOR USE - Continued****CAUTION**

When storing the light, remove batteries or unscrew the bezel far enough to prevent the lamp from turning on. The lamp can overheat and damage the light and surrounding materials.

4. Install batteries from front of mount.
  - a. Unscrew bezel (7) containing lamp/reflector (8) from flashlight housing (9).
  - b. Install two batteries or one battery pack (10) (with the + terminal facing out) in flashlight housing (9).
  - c. Screw bezel (7) with lamp/reflector (8) on flashlight housing (9).

**CAUTION**

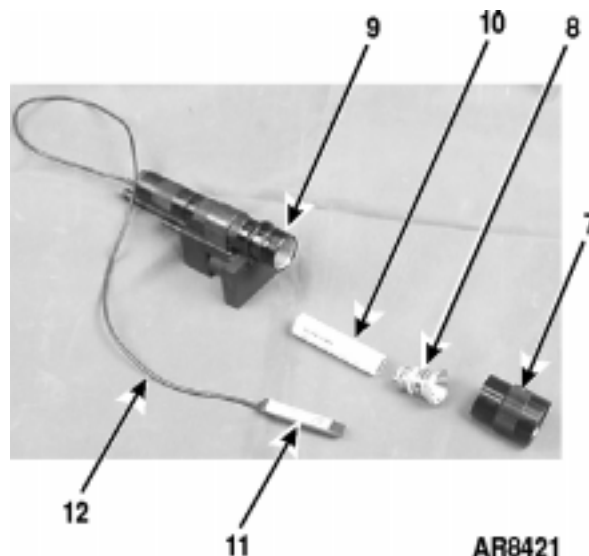
If you need to remove the rear cap assembly for any reason, hold the cable to prevent it from twisting and being damaged.

5. Position pressure switch (11).
  - a. Determine how the shield will be held.
  - b. Once the position is determined, clean the area with alcohol wipe.
  - c. Apply strip of Velcro loop material to cleaned area of shield.
  - d. Clean flat side of pressure switch (11) and attach the strip of Velcro hook material.

**CAUTION**

Cable can be snagged or damaged if it is not kept close to the shield body.

6. Place cable clamps on shield as needed to keep the cable (12) close to the shield body.



## OPERATING PROCEDURES

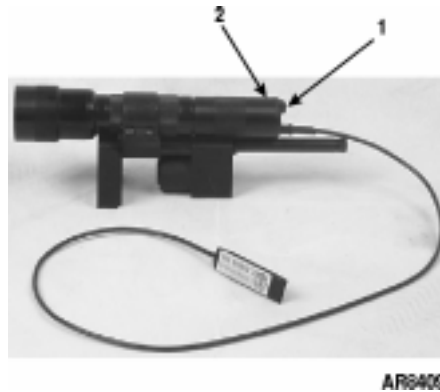
### Flag Switch

1. To turn flashlight on, turn flag switch (1) on rear cap assembly (2) on by turning the switch clockwise.

#### NOTE

Light stays on until turned off.

2. To turn flashlight off, turn flag switch (1) on rear cap assembly (2) off by turning the switch counterclockwise.



AR6409

### Pressure Switch

1. Press pressure switch (1) to turn light on.

#### NOTE

Light stays on as long as pressure is applied to the pressure switch.

2. Release pressure switch (1) to turn light off.



AR6410

END OF WORK PACKAGE

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**WOODEN BATON**  
**OPERATION UNDER USUAL CONDITIONS**

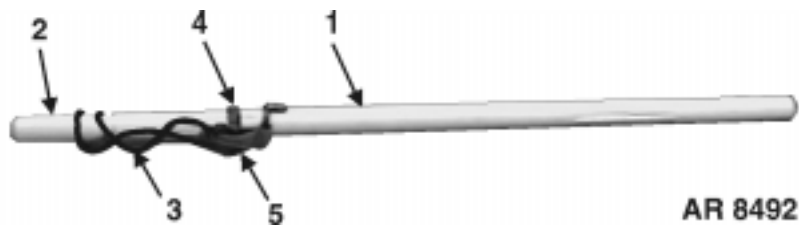
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**INITIAL SETUP:**

None

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**ASSEMBLY AND PREPARATION FOR USE**



1. The wooden baton (1) has a handle (2), a wrist strap (3), a rubber stop washer (4) and a belt holder (5).
2. Attach belt holder (5) to belt using loop with velcro fastener.
3. With handle (2) end facing up, insert baton into belt holder ring (5).
4. Slide rubber stop washer (4) up or down on baton to adjust length where baton stops when placed in belt holder.

**OPERATOR PROCEDURES**

Insert hand through wrist strap loop (3) and grasp handle (2).

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**PORTABLE BULLHORN**  
**OPERATION UNDER USUAL CONDITIONS**

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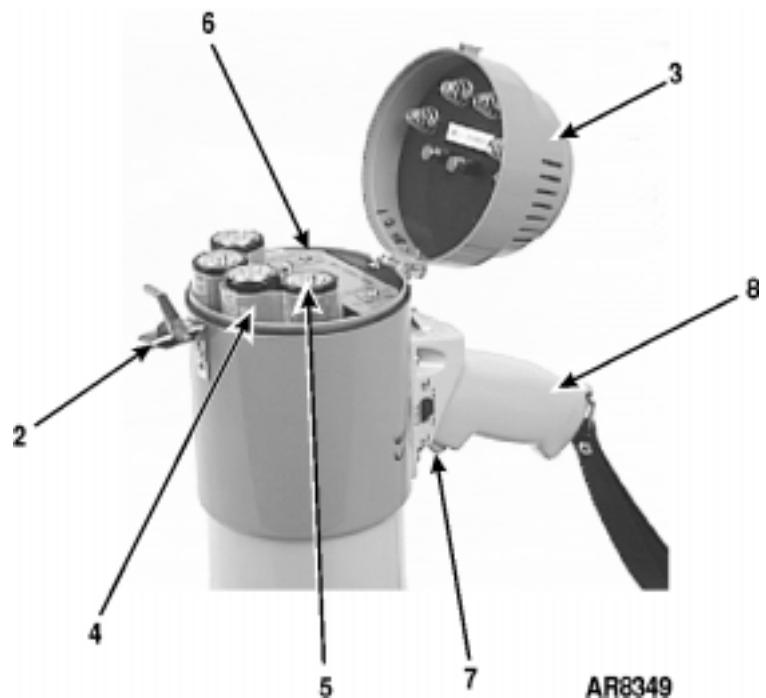
**INITIAL SETUP:****Materials/Parts**

Batteries, type C, (item 2, WP 0042 00)

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**ASSEMBLY AND PREPARATION FOR USE**

1. Insert the eight batteries into the bullhorn.
  - a. Place the bullhorn on the bell (1).
  - b. Unhook the clasp (2) to open the battery compartment cover (3).
  - c. Remove two plastic battery cases (4).
  - d. Insert four batteries (5) into each of the two battery cases (4), observing correct polarity (+ and -).
  - e. Insert the battery cases (4) with the batteries into the battery compartment (6), observing correct polarity (+ and -).
  - f. Close the battery compartment cover (3) and hook the clasp (2).
2. To ensure the batteries are charged, press in the switch (7) on the handle (8) and listen for a clicking sound.





## OPERATING PROCEDURES

### **WARNING**

When operating the portable bullhorn, use approved hearing protection to avoid hearing injury.

### **NOTE**

Drained batteries do not give sufficient sound volume. Replace the batteries at regular intervals.

1. Slip hand through the carrying strap (1) and grab the handle (2).
2. Position the bullhorn so that the opening of the bell (3) is toward the crowd and the microphone mouthpiece (4) is toward the user's mouth.
3. To adjust the volume, turn the volume knob (5) on the back of the handle (2). Turning the knob (5) to the left minimizes the sound, turning the knob (5) to the right maximizes the sound.

### **WARNING**

To avoid hearing injury, minimize the sound before speaking into the microphone.

4. Press in the switch (6) on the handle (2) while talking into the microphone mouthpiece (4).

### **WARNING**

Use caution when using the siren. The sound for the siren is loud, even if the sound volume is turned low. Injury to hearing may occur.

5. To use the siren, push the siren ON-OFF button (7) on the left side of the handle (2) to ON. Push the button (7) to OFF to turn off the siren.



### **NOTE**

Remove the batteries when the bullhorn is not in use for a long period of time.

**END OF WORK PACKAGE**

**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**GROUND MOUNTED BULLHORN**  
**OPERATION UNDER USUAL CONDITIONS**

## INITIAL SETUP:

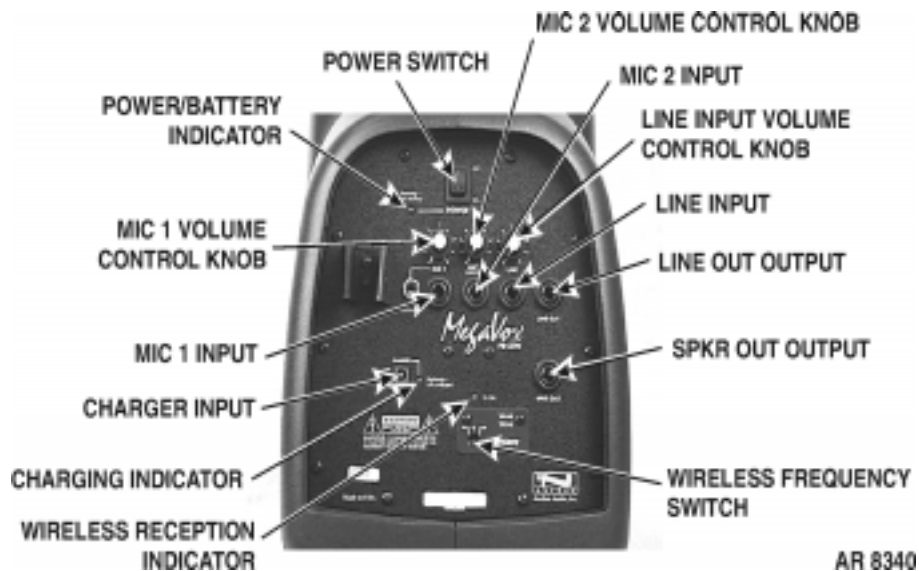
### Materials/Parts

- Battery, 12-volt, rechargeable Lead acid battery
- Battery, AA, alkaline

## INTRODUCTION

This work package includes the description and use of controls and indicators for the ground mounted bullhorn, assembly procedures for the wireless microphone and operating procedures for the wireless setup, the wireless microphone system, sound system and tripod

## DESCRIPTION AND USE OF CONTROLS AND INDICATORS.



**Table 1. Ground Mounted Bullhorn.**

| CONTROL OR INDICATOR         | FUNCTION   |
|------------------------------|--|
| Wireless Reception Indicator | Indicates the frequency of the receiver. A label on the control panel indicates the two frequencies of the system. The desired frequency is selected using the wireless frequency switch. (For PB-35W only.) |
| Charging Indicator           | A flashing light indicates the battery is charged.   |
| CHARGER Input                | The RC-16 charger is plugged into the input to charge the battery. (Use RC-16 only; RC-16/220 for export.)   |

**Table 1. Ground Mounted Bullhorn. - Continued**

| CONTROL OR INDICATOR           | FUNCTION   |
|--------------------------------|--|
| MIC 1 Input                    | An unbalanced, low impedance microphone input. For use with the Mic-50 supplied with the unit (except PB-35W), or any mic with a 1/4" phone plug which does not require phantom power.           |
| Mic 1 Volume Control Knob      | Used to increase or decrease the volume for MIC 1.   |
| Power/Battery Indicator        | A flashing light indicates the battery is getting low.   |
| POWER Switch                   | Used to turn the system off and on.  |
| Mic 2 Volume Control Knob      | Used to increase or decrease the volume for MIC 2.   |
| MIC 2 Input                    | An unbalanced, low impedance microphone input (except for model PB-35W). For use with the Mic-50 supplied with the unit, or any mic with a 1/4" phone plug which does not require phantom power. |
| Line Input Volume Control Knob | Used to increase or decrease the volume for LINE Input.  |
| LINE Input                     | Used for playback of a tap player, musical instrument or similar source. It can be used simultaneously with the mic inputs for a composite output.   |
| LINE OUT Output                | A composite of all the inputs. Used to record presentations, or to connect other powered sound systems to the bullhorn for larger crowd coverage.  |
| SPKR OUT Output                | Used to drive Anchor's model P-351 companion speaker (in addition to the bullhorn's built-in speakers) for greater output.   |
| Wireless Frequency Switch      | Used to set the system to the desired channel (F1 or F2). (For PB-35W only.)   |

**ASSEMBLY AND PREPARATION FOR USE****Wireless Microphone****CAUTION**

The transmitter power switch must be in the OFF position when inserting battery.

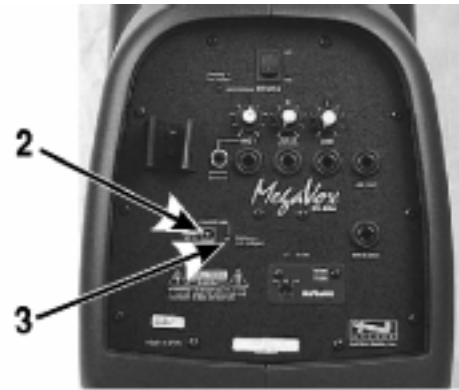
Insert the battery into the microphone.

- Ensure transmitter power switch is in OFF position (1).
- Unscrew the handle (2) counterclockwise.
- Snap the AA battery (3) into the battery compartment (4), observing correct polarity (+ and -).
- Screw the handle (2) clockwise onto the microphone until full seated.



## Charger

1. Plug the charger (1) into an AC outlet and into the charger input (2) of the bullhorn. The charging indicator (3) will light, indicating the battery is being charged.
2. When the battery is charged (approximately 8 hours), the charging indicator (3) will flash, indicating that the charger has switched to the maintenance charge rate. The charger (1) may be left plugged in to maintain a full charge without damaging the battery.

**AR8420**

## OPERATING PROCEDURES

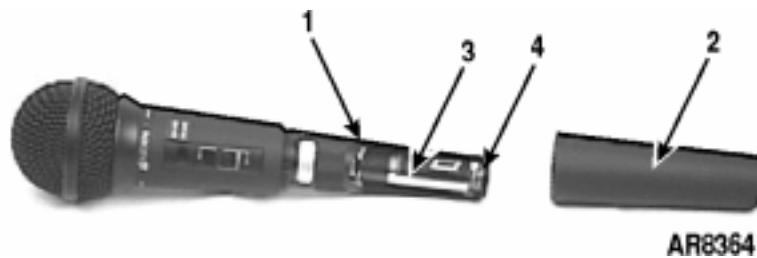
### Wireless System Setup

#### NOTE

The service time per charge will vary depending on the volume level, type of program usage and whether a companion speaker is used with the system. Medium volume is 8 to 12 hours; full volume is 3 to 6 hours.

An automatic battery protection circuit turns the unit off when the battery approaches its 'critical discharge point' to prevent damage to the battery.

1. Set the frequency of the receiver by setting the wireless frequency switch (1) to either of the two channels, F1 or F2.

**AR8364**

**Wireless System Setup - Continued****NOTE**

If there are on-going interference problems with the wireless system, the selected frequency may be incompatible with other RF systems in the area. Try the other channel.

During use, ensure the transmitter is set to the same frequency as the receiver (F1 or F2).

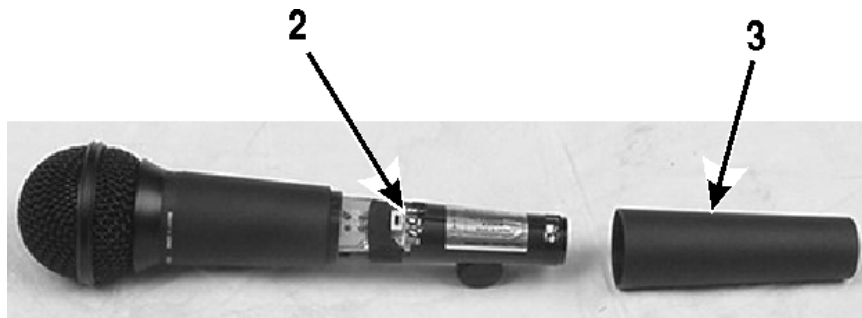
Ensure the battery for the handheld transmitter (wireless microphone) is charged. If battery needs replacing, see Assembly and Preparation for Use, Wireless Microphone in this work package.

2. Set the transmitter frequency switch (2).
- a. Unscrew handle (3) of wireless microphone.
- b. Set the frequency switch (2) inside the battery compartment to match the frequency of the receiver (F1 or F2).

**CAUTION**

Do not overtighten the handle of wireless microphone.

- c. Replace the handle (3), but do not overtighten.

**AR8419**

## Wireless Microphone System Operation

### **WARNING**

Harmful feedback may occur when walking in front of a sound system or speaker with a wireless microphone. Always point microphone away from speakers.

1. Unplug any microphone from the Mic 2 input (1).
2. Set the bullhorn's Mic 2/Wireless volume control (2) to minimum.
3. Turn the bullhorn's sound system power switch (3) to ON.
4. Set the transmitter power switch (4) on the microphone to ON.

### **NOTE**

The sound system's wireless reception indicator will be lit to indicate that the wireless signal (RF) is being transmitted and received.

5. Ensure wireless signal (5) is being transmitted.
6. Adjust the Mic 2/Wireless volume control (2) to desired volume.



## Sound System

### **WARNING**

Feedback may be hazardous to hearing and can damage equipment. Always make sure volume controls are a minimum before turning on unit. If feedback occurs, immediately reduce the volume.

### **NOTE**

These procedures apply when using a wired microphone or audio source.

1. Set all input level controls to minimum before turning on the power.
2. Plug a microphone into one of the Mic input jacks, or connect an audio source to the line input.

## Sound System - Continued

### NOTE

If the battery indicator begins flashing, the battery is low and the unit will shut off in 15 to 30 minutes. If the battery indicator flashes or does not light when power is turned on, the battery must be charged (see Assembly and Preparation for Use, Charger in this work package..

3. Turn power ON (red indicator next to switch will light).
4. Adjust the level control adjacent to the input used to desired volume level.

### Tripod

1. Loosen leg fitting handknob (1).



2. Turn tripod upside down and spread out legs enough to start sliding the leg fitting (2).



3. Turn tripod upright and slide leg fitting (2) to adjust diameter of leg spread. Tighten leg fitting handknob (1).
4. Loosen handknob (3) on telescoping collar (4) and raise center tube (5) 6-10 inches.

**Tripod - Continued****CAUTION**

Only attach bullhorn when stand is in a fully upright position (all legs on the floor).

Do not drag the stand while the bullhorn is attached. The fittings could break and cause damage to the stand.

Ensure the telescoping collar is securely locked when the bullhorn is attached.

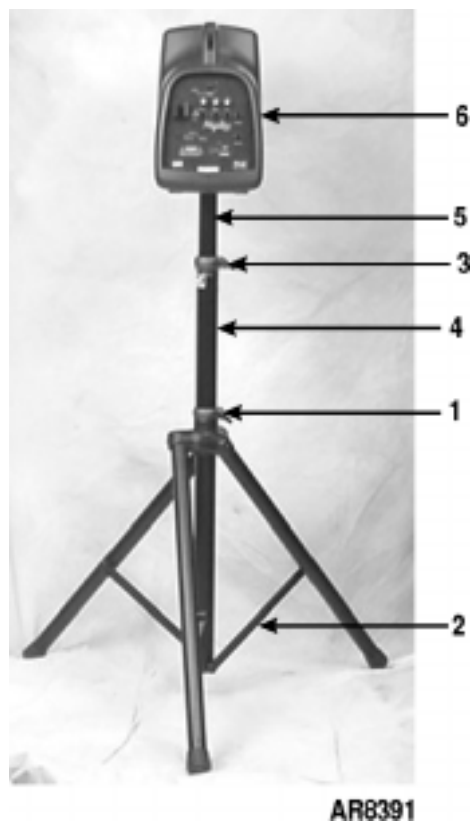
Do not exceed 110 pounds (50 kg) on tripod or tripod might collapse.

5. Attach bullhorn (6) to tripod by carefully sliding the bottom center of the bullhorn onto the telescoping collar (4).

**CAUTION**

Always release the collar with caution and stand clear of load.

6. Raise tripod to the desired height using handknob (3). Tighten handknob.
7. To lower bullhorn height, slowly loosen handknob (3).



**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**AUDIO FREQUENCY AMPLIFIER**  
**OPERATION UNDER USUAL CONDITIONS**

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**INITIAL SETUP:****Materials/Parts**

Battery, 9-volt, alkaline (item 5, 0042 00)

**Equipment Conditions**

M40 Mask (TM 3-4240-340-10)

**References**

TM 3-4240-340-10

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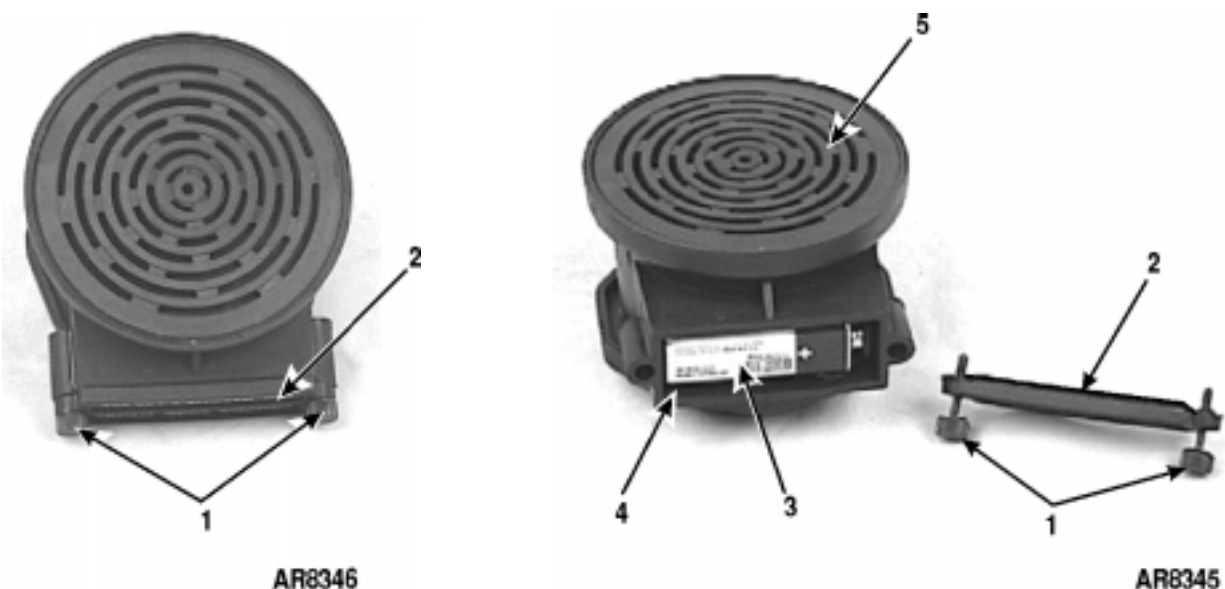
**ASSEMBLY AND PREPARATION FOR USE**

1. Insert the battery into the amplifier.

**NOTE**

The battery lid knobs do not have to be completely removed for the battery lid to separate from the amplifier. Loosening the knobs rather than removing them will ensure the knobs do not get lost.

- a. Loosen, do not remove, the two battery lid knobs (1) counterclockwise until the battery lid (2) separates from the amplifier.
  - b. Connect the battery (3) to the terminals and place in the battery compartment (4), observing correct polarity (+ and -).
  - c. Replace the battery lid (2) by turning the two knobs (1) clockwise until finger tight.
2. To ensure the battery is charged, gently tap on the microphone (5) and listen for a clicking sound.



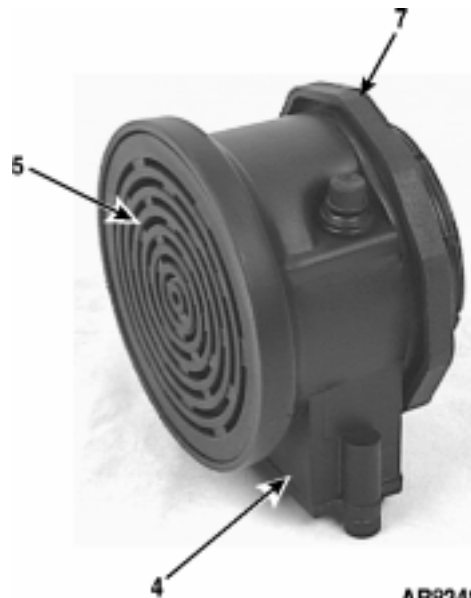
**ASSEMBLY AND PREPARATION FOR USE - Continued****NOTE**

The M40 mask should be put on before attaching the amplifier. See TM 3-4240-340-10 for information on the M40 mask.

3. Attach the amplifier to the M40 mask.
  - a. Position the amplifier in front of the mask (6) with the microphone (5) facing outward and the battery compartment (4) toward the ground.
  - b. Holding the amplifier in one hand, use the other hand to turn the ring (7) clockwise onto the front voicemitter (8) on the mask (6) until fully seated.



AR8355



AR8348

**OPERATING PROCEDURES**

To turn on the amplifier, press the speaker button (1) while talking into the amplifier.



AR8347

**END OF WORK PACKAGE**

---

**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**INDIVIDUAL HIGH INTENSITY LIGHT**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

**Materials/Parts**

Battery, lithium, DL1 23A or Battery Pack, lithium,  
DL223A  
Pouch

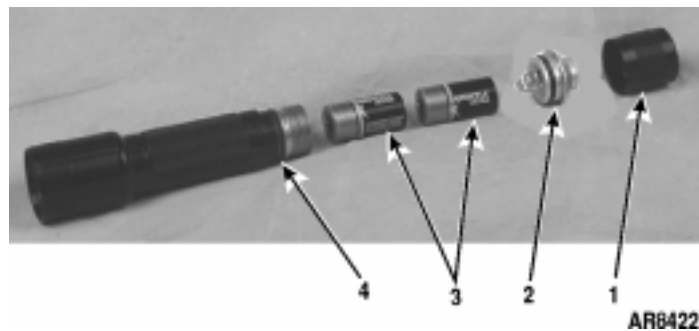
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**ASSEMBLY AND PREPARATION FOR USE**

**CAUTION**

When storing the light, remove batteries or unscrew the tail cap far enough to prevent the lamp from turning on.  
The lamp can overheat and damage the light and surrounding materials.

1. Insert batteries into the light.
  - a. Unscrew tail cap (1) which holds tail cap button contact (2)
  - b. Insert batteries (3) or battery pack, plus end first, into housing (4) and replace contact (2) and tail cap (1).



**OPERATING PROCEDURES**

1. To turn light on momentarily, press on tail cap button (1).

**NOTE**

Light stays on as long as pressure is applied.

2. To turn light on for continuous light, rotate tail cap (2) clockwise; to turn it off, rotate tail cap (2) counterclockwise.

**NOTE**

Pouch is available to carry light.

**END OF WORK PACKAGE**

---

**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**HIGH INTENSITY LIGHT WITH ACCESSORY KIT**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

None

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**ASSEMBLY AND PREPARATION FOR USE**

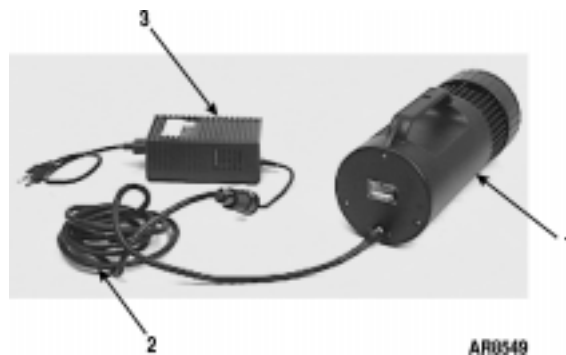
1. To attach filter (1):

With filter lip facing out, screw filter securely over the lens (2).



2. To use with external power source:

Connect light (1) to power source (e.g, vehicle) with supplied 10-foot power cord (2). The AC/DC converter (3) can be used to supply the unit for charging the internal battery or for operating light.



---

## OPERATING PROCEDURES

### **WARNING**

Do not touch lens when light is on. Skin burns may result.

Do not point light directly at face of persons closer than 50 feet. Serious eye damage could occur.

Do not shine light at driver of oncoming vehicle closer than several hundred yards from light. Temporary light blindness could occur and cause accident with vehicle.

Turn off unit when adding or removing accessory filter. Burns may occur.

Do not operate in explosive environment. Battery may vent and release flammable hydrogen gas. Charge battery in well-ventilated room or open air.

1. To turn on, press ON/OFF button (1). Light will be in high-power mode.

### **NOTE**

If beam does not come on and stay on, wait 5 seconds and try again. If ON button is depressed before the 5-second delay, the light will not start.

2. To turn off, quickly press and release button (1).
3. To focus, turn focus ring (2) clockwise to tighten beam; counterclockwise to widen beam.
4. To put in battery saver mode, press and hold button (1) until beam changes noticeably.



**END OF WORK PACKAGE**

---

**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**DISPOSABLE RESTRAINT SYSTEM (DRS)**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

None

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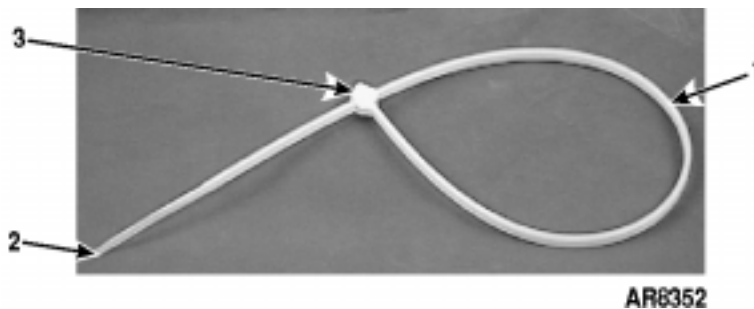
**OPERATING PROCEDURES**

1. Place the band (1) around the desired object (e.g., subject's wrists or ankles, weapons).

**NOTE**

Once the smooth end of the band is inserted into the locking end of the band, the smooth end can't be removed.  
The bands are not reusable.

2. Insert the smooth end of the band (2) into the locking end of the band (3).
3. Pull on the smooth end of the band (2) until the object is secure.



4. Use a cutting tool (4) to remove the band.

**NOTE**

Several bands can be used together if needed (e.g., to form handcuffs).



**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**CALTROPS**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

**Materials/Parts**

Cord, rope or wire (item 7 or 8, 0042 00)

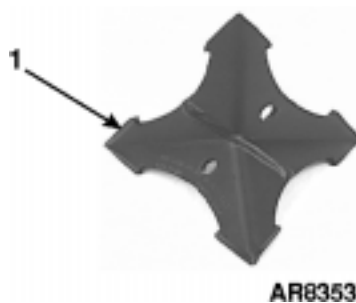
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**OPERATING PROCEDURES**

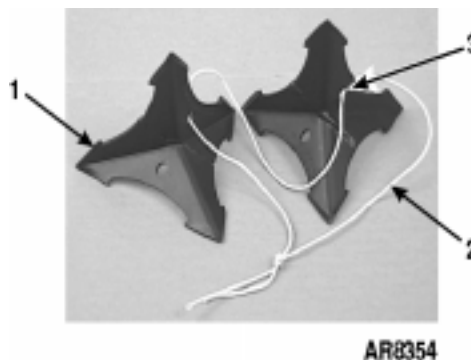
**WARNING**

The caltrops has sharp points. To avoid injury, handle carefully.

1. Place, toss or throw the caltrops (1) in desired location (e.g., roadway or walkway).



2. If connecting more than one caltrops (1) together:
  - a. Insert a cord, wire or rope (2) through one of the caltrops holes (3).
  - b. Connect the desired number of caltrops (1).
  - c. Tie the ends of the cord, wire or rope (2) together.
  - d. Place, toss or throw the string of caltrops (1) in desired location.



**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**12 GAUGE SHOTGUN LIGHT**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

**Tools and Special Tools**

Installation tool

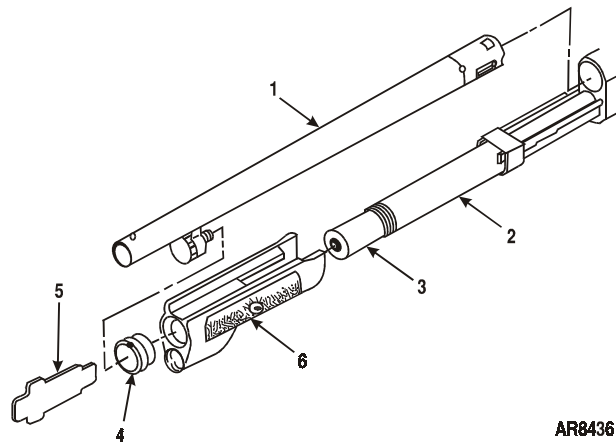
**Materials/Parts**

Battery, lithium, 3-volt

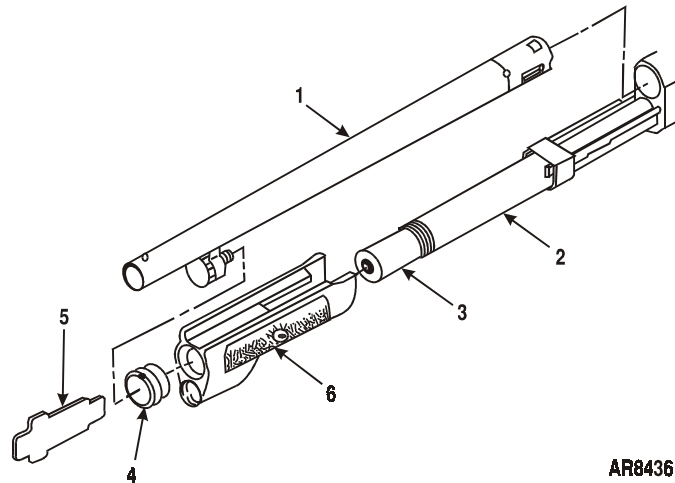
Alcohol wipe

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**ASSEMBLY AND PREPARATION FOR USE**



1. Install light fore-end assembly (H22 Housing) (6).
  - a. Put the shotgun Safety on safe.
  - b. Open the action and ensure no shells remain in the chamber or the magazine.
  - c. Close the action and remove the barrel (1).
  - d. Remove the fore-end tube assembly (2) from the magazine tube (3) of shotgun.
  - e. Unscrew and remove the fore-end tube nut (4) from housing (6) using the installation tool (5) supplied in the kit.

**ASSEMBLY AND PREPARATION FOR USE - Continued****AR8436**

- f. Remove the wooden fore-end by pulling straight off the fore-end tube.
- g. Replace wooden fore-end by sliding the H22 housing (6) on to the fore-end tube assembly (2).
- h. Reinstall the fore-end tube nut (4) using the installation tool (5).
- i. Install the fore-end tube assembly (2) on the receiver.
- j. Reassemble barrel and tighten firmly with magazine cap.

**WARNING**

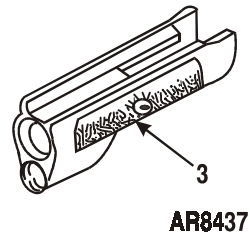
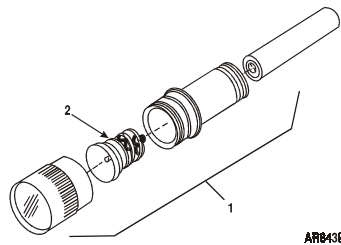
Lithium batteries can explode or cause burns if disassembled, shorted, recharged or exposed to fire or high temperatures. Handle with care.

**CAUTION**

When the bezel is removed from the lamp housing, the lamp can fall out. Handle with care.

**ASSEMBLY AND PREPARATION FOR USE - Continued**

2. Install battery.

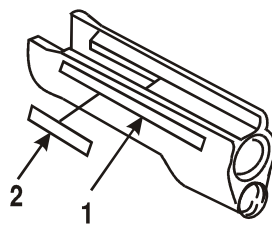


- a. Install the battery inside L60 Lamp Module (1) with the + terminal toward reflector bezel assembly.
- b. Turn the lamp module clockwise in to the H22 housing (3) until fully seated..

3. Install Switch Blocker.

**NOTE**

The switch blocker will disable an area of the pressure switch so user can rest hand without turning on light.



**AR8438**

- a. Clean portion of pressure switch (1) to be disabled using alcohol wipe from kit.
- b. Remove backing from switch blocker (2) and press switch blocker onto the pressure switch (1).

**OPERATING PROCEDURES**

To turn on the high intensity light, apply finger pressure to the pressure switch (1) on the side of the H22 housing (2).



**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**POUCHES**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

None

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**ASSEMBLY AND PREPARATION FOR USE**

**12 Gauge Utility Pouch (25 Round)**

1. To attach the pouch to a belt, use the two black clips (1) on the back of the pouch.
2. To open and close the pouch, use the black plastic buckle (2) on the front of the pouch.



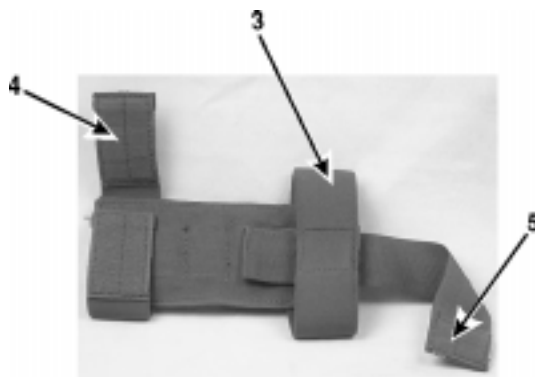
AR8360



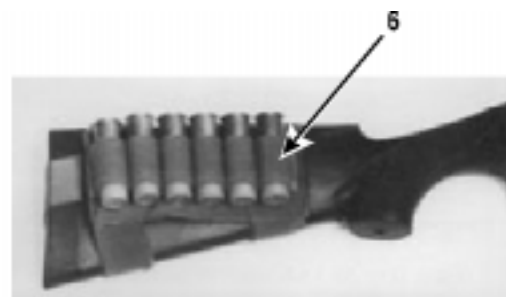
AR8361

**12 Gauge Buttcuff Carrier (6 Round)**

1. To attach the buttcuff carrier to the shotgun stock (butt), slide the buttcuff over the barrel and down the stock until buttcuff is secure. Fit circular strap (3) and secure the carrier to the weapon stock using the two velcro straps (4, 5).
2. To use the carrier, slide the rounds into the holders (6).



AR8373



AR8357

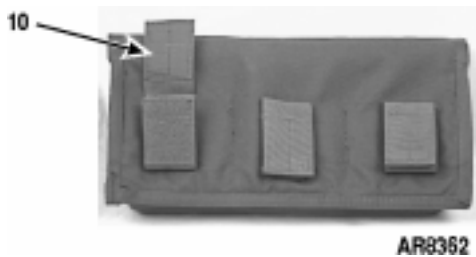


**ASSEMBLY AND PREPARATION FOR USE - Continued****Diversionary/Rubber Ball or Flash Grenade Pouch**

1. To attach the pouch,
  - a. Use the velcro strap (7) to secure the pouch to the belt.
  - b. Use the buckle straps (8) to secure the pouch to the thigh.
2. To open and close the grenade pockets, use the velcro flaps (9).

**40mm Carrying Pouch**

1. To attach the pouch to a belt, use the velcro straps (10) on the back of the pouch.
2. To open and close the pouch, use the velcro flap (11) on the front of the pouch.

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**RIOT TRAINING SUIT**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

**Personnel Required**

Two

---

**ASSEMBLY AND PREPARATION FOR USE**

**WARNING**

To avoid injury, all strap and tie connections on the suit must be secured prior to use.

**NOTE**

Avoid twisting the velcro straps when connecting components. Tighten velcro straps on all equipment for a snug fit.

1. Remove the suit and the accessories from the carrying bag.



2. Put on the thigh (1) and shin (2) protectors.
3. Put on the chest and back protector (3). To secure the chest and back protector, adjust the velcro over the shoulder for height and the velcro straps on the sides for width.
4. Put on the groin and buttock protector (4).
5. Put on the forearm protectors (5).

---

**ASSEMBLY AND PREPARATION FOR USE - Continued****NOTE**

Putting the chin in the helmet first makes it easier to put on the helmet.

6. Put on the helmet (6). To secure the helmet, adjust the cord on the top and the velcro on the back (7).
7. Put on the gloves (8).
8. Have another person check all the connections on the suit before using.

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**RIOT TRAINING BAG**  
**OPERATION UNDER USUAL CONDITIONS**

---

**INITIAL SETUP:**

None

---

**OPERATING PROCEDURES**

**NOTE**

The riot training bag can be held by the right hand or the left hand. For use with the left hand, turn the riot training bag upside down from picture shown.

To hold the bag, insert the desired hand through the bag strap (1) and grab the handle (2). The strap (1) should rest against the bent elbow (3).



**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE  
NON-LETHAL CAPABILITY SET  
(NSN TBD)  
OPERATION UNDER UNUSUAL CONDITIONS**

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Not applicable.

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**CHAPTER 3**

**TROUBLESHOOTING PROCEDURES**  
**FOR**  
**NON-LETHAL CAPABILITY SET**



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**OPERATOR MAINTENANCE  
NON-LETHAL CAPABILITY SET  
(NSN TBD)  
TROUBLESHOOTING INTRODUCTION**

---

**TROUBLESHOOTING PROCEDURES**

The troubleshooting work package (WP 0026 00) contains a table listing the malfunctions, tests or inspections, and corrective action required to return the equipment to normal operation. Perform the steps in the order they appear in the tables.

The work package is headed by an initial setup. This setup outlines what is needed as well as certain conditions which must be met before starting the task. **DON'T START A TASK UNTIL:**

- You understand the task.
- You understand what you are to do.
- You understand what is needed to do the work.
- You have the things you need.

This manual cannot list all malfunctions that may occur, or all tests or inspections and corrective actions. If a malfunction is not listed or is not corrected by listed corrective actions, notify your supervisor or unit maintenance.

**END OF WORK PACKAGE**

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**NLCS TROUBLESHOOTING PROCEDURES**

**INITIAL SETUP:****Materials/Parts**

## Batteries:

3 volt Lithium (6)

AA (1)

12 Volt (1)

C, dry cell (8)

**NON-LETHAL CAPABILITY SET**

Table 1. Troubleshooting Procedures for Non-Lethal Capability Set.

| MALFUNCTION  | TEST OR INSPECTION  | CORRECTIVE ACTION  |
|--|---|--|
| 1. LIGHT FOR BODY SHIELDS<br>LIGHT DOES NOT LIGHT    | 1. Check power switch.<br><br>2. Check that batteries are properly installed and working.<br><br>3. Check bulb. | 1. Turn power switch ON. If light does not work, go to step 2.<br><br>1. If necessary, replace batteries (see WP 0011 00). If light does not work, go to step 3.<br><br>1. If bulb is burned out or damaged, replace lamp (see WP 0029 00).<br><br>2. If light does not work, item is unserviceable. |
| 2. PORTABLE BULL HORN<br>SIREN/SPEAKER DOES NOT WORK | 1. Check power switch and volume.<br><br>2. Check that batteries are properly installed and working.            | 1. Turn power switch on. Adjust volume. If bull horn does not work, go to step 2.<br><br>1. If necessary, replace batteries (see WP 0013 00). If bull horn does not work, item is unserviceable.   |

**Table 1. Troubleshooting Procedures for Non-Lethal Capability Set.**

| <b>MALFUNCTION</b>  | <b>TEST OR INSPECTION</b>   | <b>CORRECTIVE ACTION</b>  |
|---|---|---|
| 3. GROUND MOUNTED BULL HORN WIRELESS MICROPHONE DOES NOT WORK | <ol style="list-style-type: none"> <li>1. Check power switch.</li> <li>2. Check that batteries are properly installed and working.</li> </ol>                         | <ol style="list-style-type: none"> <li>1. Turn power switch ON. If GMBH wireless microphone does not work, go to step 2.</li> <li>1. If necessary, replace batteries (see WP 0014 00). If GMBH wireless microphone does not work, item is unserviceable.</li> </ol>   |
| 4. AUDIO FREQUENCY AMPLIFICATION SYSTEM NOT WORKING           | <ol style="list-style-type: none"> <li>1. Check that battery is properly installed and working.</li> </ol>  | <ol style="list-style-type: none"> <li>1. If necessary, replace battery (see WP 0015 00). If amplification system does not work, item is unserviceable.</li> </ol>  |
| 5. INDIVIDUAL HIGH INTENSITY LIGHT DOES NOT LIGHT             | <ol style="list-style-type: none"> <li>1. Check power switch.</li> <li>2. Check that batteries are properly installed and working.</li> <li>3. Check bulb.</li> </ol> | <ol style="list-style-type: none"> <li>1. Turn power switch ON. If light does not work, go to step 2.</li> <li>1. If necessary, replace batteries (see WP 0017 00). If light does not work, go to step 3.</li> <li>1. If bulb is damaged or burned out, replace lamp (see WP 0029 00).</li> <li>2. If light does not work, item is unserviceable.</li> </ol>                    |
| 6. HIGH INTENSITY LIGHT BEAM DOES NOT APPEAR                  | <ol style="list-style-type: none"> <li>1. Check power switch.</li> <li>2. Charge battery.</li> <li>3. Check lamp.</li> </ol>  | <ol style="list-style-type: none"> <li>1. Wait 5 seconds for starting circuit to reset, then press and release ON button again.</li> <li>1. If operating from a vehicle, be sure that engine is running.</li> <li>2. If light does not stop flashing after battery is charged, replace battery.</li> <li>1. If bulb is damaged or burned out, item is unserviceable.</li> </ol> |

**Table 1. Troubleshooting Procedures for Non-Lethal Capability Set.**

| <b>MALFUNCTION</b>  | <b>TEST OR INSPECTION</b>  | <b>CORRECTIVE ACTION</b>  |
|---|--|---|
| 7. HIGH INTENSITY LIGHT FOR 12-GAUGE SHOTGUN DOES NOT LIGHT | 1. Check power switch.<br><br>2. Check that batteries are properly installed and working.<br><br>3. Check lamp assembly. | 1. Turn power switch ON. If light does not appear, go to step 2.<br><br>1. If necessary, replace batteries (see WP 0020 00). If light does not work, go to step 3.<br><br>1. If bulb is damaged or burned out, replace lamp assembly (see WP 0029 00).<br><br>2. If light does not work, item is unserviceable. |
| 8. POUCH HAS LOOSE ATTACHMENT                               | 1. Close Velcro strapping and press to secure closure and contact.   | 1. If Velcro does not hold, with fingers, remove any foreign matter which may be stuck in the Velcro. If closure does not hold, item is unserviceable.  |
| 9. TRAINING EQUIPMENT VELCRO NOT HOLDING TOGETHER           | 1. Attach Velcro strip to other strip and apply hand pressure to hold.   | 1. If Velcro does not hold, with fingers, remove any foreign matter which may be stuck in the Velcro. If closure does not hold, item is unserviceable.  |

**END OF WORK PACKAGE**

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**CHAPTER 4**

**OPERATOR MAINTENANCE INSTRUCTIONS**  
**FOR**  
**NON-LETHAL CAPABILITY SET**

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**OPERATOR MAINTENANCE  
NON-LETHAL CAPABILITY SET  
(NSN TBD)**

**PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION**

---

**INITIAL SETUP:**

**References**

DA PAM 738-750

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**GENERAL**

Preventive maintenance is the systematic care, servicing and inspection of equipment to prevent occurrence of trouble and to reduce down time. These checks and services help maintain the equipment in a combat serviceable and mission ready condition.

**EXPLANATION OF COLUMNS IN THE PMCS TABLE**

1. Item Number Column - Numbers in this column are for reference. Item numbers appear in the order in which checks and services must be performed for the intervals listed.
2. Interval Column - This column tells you when each check is to be performed in the procedure column.
3. Man-hour Column - This column gives the man-hours required to complete all prescribed lubrication services.
4. Item To Be Checked or Serviced Column - This column lists the item to be checked or serviced.
5. Procedure Column - This column gives the procedure you must do to check or service the item listed in the Item To Be Checked or Serviced column to know if the equipment is ready or available for its intended mission or for operation. You must do the procedure at the time stated in the interval column.
6. Equipment Not Ready/Available If: Column - Information in this column tells you what faults will keep your equipment from being capable of performing its primary mission. If applicable, following Equipment Not Ready/Available If: condition is a suggested remedy that will correct the discovered discrepancy. Follow standard operating procedures for maintaining the equipment or reporting equipment failure. Report any malfunctions or failures on DA Form 2404 or refer to DA PAM 738-750.

**END OF WORK PACKAGE**



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**OPERATOR MAINTENANCE  
NON-LETHAL CAPABILITY SET  
(NSN TBD)**

**OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

**INITIAL SETUP:**

**References**

WP 0011 00  
WP 0013 00  
WP 0014 00  
WP 0015 00

**References - Continued**

WP 0017 00  
WP 0020 00  
WP 0026 00  
WP 0029 00

**OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES FOR NLCS**

**Table 1. Operator PMCS for NLCS .**

| <b>ITEM NO.</b> | <b>INTERVAL</b> | <b>MAN-HOUR</b> | <b>ITEM TO BE CHECKED OR SERVICED</b>              | <b>PROCEDURE</b>   | <b>EQUIPMENT NOT READY/ AVAILABLE IF:</b>     |
|-----------------|-----------------|-----------------|--|--|---|
| 1               | Before          |                 | Non-Lethal Capability Set                          | Inspect components for debris or corrosion. Clean as needed (see WP 0029 00).  | Components too corroded to function properly. |
| 2               | Before          |                 | Components in NLCS Requiring Lamp and/or Batteries | <ol style="list-style-type: none"> <li>1. Check to ensure components operate properly.</li> <li>2. Replace lamps for the light kit used on the body shields, the individual high intensity light, and the high intensity light used on the 12 gauge shotgun, as needed (see WP 0029 00).</li> <li>3. Replace/recharge batteries, as needed. (Refer to the "Assembly and Preparation for Use" section in the following referenced WPs.) <ol style="list-style-type: none"> <li>a. Light kit for body shields, see WP 0011 00.</li> <li>b. Portable bullhorn, see WP 0013 00.</li> <li>c. Ground mounted bullhorn, see WP 0014 00.</li> <li>d. Cordless microphone for the ground mounted bullhorn, see WP 0014 00.</li> </ol> </li> </ol> | Components do not operate properly.           |

**OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES FOR NLCS - Continued****Table 1. Operator PMCS for NLCS - Continued.**

| <b>ITEM NO.</b> | <b>INTERVAL</b> | <b>MAN-HOUR</b> | <b>ITEM TO BE CHECKED OR SERVICED</b>                          | <b>PROCEDURE</b>   | <b>EQUIPMENT NOT READY/ AVAILABLE IF:</b> |
|-----------------|-----------------|-----------------|--|--|---|
| 2               | Before          |                 | Components in NLCS Requiring Lamp and/or Batteries - Continued | e. Audio frequency amplifier, see WP 0015 00.<br>f. Individual high intensity light, see WP 0017 00.<br>g. High intensity light kit for the 12 gauge shotgun, see WP 0020 00.<br>4. If components do not operate properly after lamp and/or battery replacement, refer to Troubleshooting Procedures (see WP 0026 00). |   |
| 3               | After           |                 | Non-Lethal Capability Set                                      | See Item No. 1.  |   |

**END OF WORK PACKAGE**

---

**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**CLEANING AND REPLACEMENT**

---

**INITIAL SETUP:****Materials/Parts**

Alcohol (item ?, 0042 00)  
Cleaning kit for ballistic face shield (item 8, 0042 00)  
Cleaning kit for non-ballistic face shield (item 7,  
0042 00)  
Cleaner, glass (item ?, 0042 00)  
Cleaner, safe for plastic (item ?, 0042 00)

**Materials/Parts - Continued**

Cloth, cotton (item ?, 0042 00)  
Detergent, mild (item ?, 0042 00)  
Soap, mild (item ?, 0042 00)  
Sponge (item ?, 0042 00)

---

**INTRODUCTION**

This work package contains cleaning procedures for the components in the NLCS and replacement procedures for the P60 lamp used in the shield light, the individual high intensity light and the 12 gauge shotgun light.

**CLEANING****CAUTION**

Do not immerse any component in water.

1. Clean the following components using mild soap or detergent and a sponge. Air dry the component.
  - a. Pouches.
  - b. Riot training suit.
  - c. Riot training bag.

**CAUTION**

Do not disassemble the components for cleaning. Clean only the outside.

2. Clean the following components using ONLY a damp cloth and then air drying.
  - a. Light kit for body shields.
  - b. Wooden baton.
  - c. Portable bullhorn.
  - d. Ground mounted bullhorn and accessories.
  - e. Audio frequency amplifier.
  - f. Individual high intensity light.

---

**CLEANING - Continued**

3. High intensity light.

**CAUTION**

Do not remove the heat sink or access internal electronic circuitry.

Do not clean if any item on the light is hot.

Do not use an industrial cleaner.

- a. Clean the light by rotating the focus ring and wiping out any debris. Air dry.
  - b. Clean the carrying case using a soft cloth and a mild cleaner safe for plastic.
  - c. Clean the lens and filter using a soft cloth and a glass cleaner or alcohol.
4. Non-ballistic and ballistic face shields, body shields and shin guards.

**CAUTION**

The non-ballistic face shield and body shield are made of polycarbonate plastic. Do not use solvents, abrasives or chemicals to clean. To avoid scratching the plastic, handle the shields with care.

Materials, subject to corrosion in oxygen, salt air, ultraviolet or any other atmospheric conditions likely to occur during service usage, should be protected against such elements to minimize the corrosion/degradation effect of the component. Any protective coating that will crack, chip or scale with age or extremes of atmospheric conditions should not be used.

- a. Clean using clean water and a clean cotton cloth.
- b. For slight scratching on the non-ballistic face shield or body shield, remove scratches using toothpaste and water. Wipe down with a cloth and water.

---

**REPAIR OR REPLACEMENT****CAUTION**

Do not use any lamp other than the 6 volt P60 lamp included as a component in the NLCS. If another volt is used, the lamp will burn out immediately. The 6 volt P60 lamp in the NLCS has a blue band with the words "6v...P60".

The lamp may fall out of the light and break when the bezel is being removed from or assembled onto the handle.

**NOTE**

The replacement procedures for the body shield light, the individual high intensity light and the shotgun light are the same. The individual high intensity light is shown in the illustration.

1. Unscrew the bezel (1) counterclockwise to remove.
2. Remove the lamp (2).
3. Insert the replacement lamp (2) in the bezel (1).
4. Assemble the bezel (1) onto the handle (3) by turning clockwise until fully seated.

**END OF WORK PACKAGE**

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**CHAPTER 5**

**UNIT MAINTENANCE INSTRUCTIONS**  
**FOR**  
**NON-LETHAL CAPABILITY SET**



**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**SERVICE UPON RECEIPT**

---

**INITIAL SETUP:****References**

DA PAM 738-750  
WP 0032 00

---

**SERVICE UPON RECEIPT OF MATERIEL**

Inspect the equipment for damage incurred during shipment. If the equipment has been damaged, report the damage on SF 361, Transportation Discrepancy Report.

Check the equipment against the packing slip to see if the shipment is complete. Report all discrepancies in accordance with applicable service instructions (e.g., for Army instructions, see DA PAM 738-750).

Check to see whether the equipment has been modified.

**INSTALLING INSTRUCTIONS**

The Non-Lethal Capability Set does not have to be installed. The non-ballistic riot body shield and the ballistic body shield in the set need to be assembled upon receipt, see WP 0032 00.

**END OF WORK PACKAGE**

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**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**

**UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)**

---

**INITIAL SETUP:**

**References**

WP 0027 00

---

**GENERAL**

See WP 0027 00 for the explanation of columns in the PMCS table.

**UNIT PREVENTIVE MAINTENANCE CHECKS AND SERVICES FOR NLCS**

**Table 1. Unit PMCS for NLCS .**

| <b>ITEM NO.</b> | <b>INTERVAL</b>  | <b>MAN-HOUR</b> | <b>ITEM TO BE CHECKED OR SERVICED</b> | <b>PROCEDURE</b>                                  | <b>EQUIPMENT NOT READY/ AVAILABLE IF:</b>                          |
|-----------------|------------------|-----------------|---------------------------------------|---|--|
| 1               | Before and After |                 | Non-Lethal Capability Set             | Visually inventory and inspect components in set. | Components missing or damaged to extent that they can not be used. |

**END OF WORK PACKAGE**

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**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**

**ASSEMBLY OF NON-BALLISTIC RIOT BODY SHIELD**

---

**INITIAL SETUP:**

**Tools and Special Tools**

Screwdriver, 4 inch, cross tip, No. 2

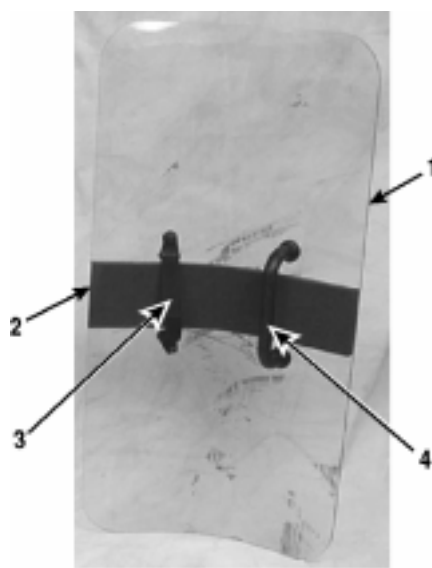
**Materials/Parts**

Cross head screw (larger) with rubber washer (2) for handle

Cross head screw (smaller) with rubber washer (2) for forearm strap

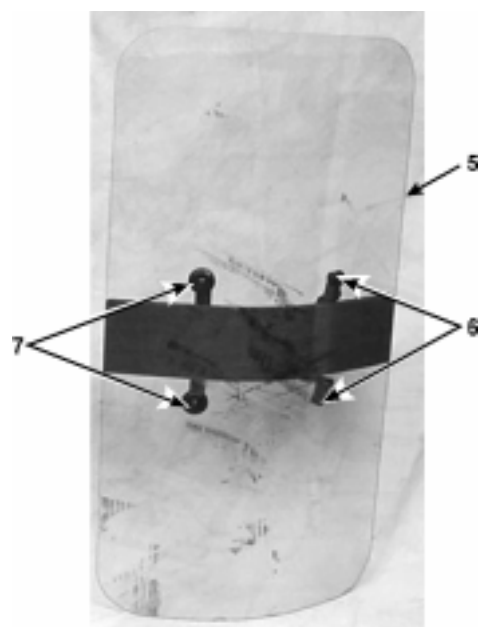
---

**ASSEMBLY**



**BACK**

**AR8433**



**FRONT**

**AR8434**

1. The Non-Ballistic Body Shield (1) is made of a slightly curved 24 inches wide by 48 inches high (61 by 122 cm), 0.250 inch (6mm) thick piece of exceptionally strong polycarbonate plastic. On the back of the shield or side facing the warfighter are an arm cushion (2) and an adjustable forearm strap (3) and a rigid handle (4) that require assembly.
2. To assemble the forearm strap and handle, lean shield against a non-abrasive support with the front side (5) facing out.
3. The plastic shield has two sets of holes with two holes each. One hole in each set is above the arm cushion (2) with the other hole just beneath it below the arm cushion. One pair of holes (6) is for the forearm strap (3) and the second pair of holes (7) is for the handle (4).

**ASSEMBLY - Continued****NOTE**

Assembled shield can be turned 180 degrees for right or left hand use.

4. Assemble forearm strap (3):
  - a. Each end of the forearm strap (3) has a flat mounting plate, with a metal threaded hole on one side.
  - b. From the back side (1) of the shield using either hand, align and hold the threaded hole on one end of the wrist strap with first hole (6) above the arm cushion (2) for the forearm strap (3) in the shield.

**WARNING**

Do not overtighten cross head screws. Doing so may weaken or crack plastic and seriously degrade shield performance.

- c. With the other hand, take a smaller supplied cross screw fitted with a rubber washer and from the front side (5) of the shield, screw the cross head screw clockwise into the forearm strap mounting plate threads (3) and hand tighten using a No.2 cross tip screwdriver.
  - d. Repeat procedures b and c for attaching other end of forearm strap (3) to second hole (6) in shield for forearm strap.
  - e. To disassemble, remove two cross head screws (6) using #2 cross tip screwdriver. Retain forearm strap (3) and two smaller cross head screws and washers with non-ballistic body shield for later reuse.
5. Assemble handle (4):
  - a. Each end of the rigid handle (4) has a flat matting surface with a metal threaded hole.
  - b. From the back side of the shield (1) using either hand, align and hold the threaded holes on each end of the mating surfaces of the handle with a set of top and bottom holes (7) in the shield.

**WARNING**

Do not overtighten cross head screws. Doing so may weaken or crack plastic and seriously degrade shield performance.

- c. From the front of the shield (5) with the other hand, take each of the two larger supplied cross screws fitted with a rubber washer, screw the top and then the bottom cross head screw clockwise into the corresponding threaded holes (7) in the handle (4) hand tight using a No.2 cross tip screwdriver.
  - d. To disassemble, remove cross head screws (7) using #2 cross tip screwdriver. Retain handle (4) and two larger cross head screws and washers for later reuse.

**END OF WORK PACKAGE**

**CHAPTER 6**

**SUPPORTING INFORMATION  
FOR  
NON-LETHAL CAPABILITY SET**

---

**OPERATOR AND UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**REFERENCES**

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**SCOPE**

This work package lists all Army regulations, forms, pamphlets, technical bulletins, and technical manuals referenced in this manual.

**ARMY REGULATIONS**

|           |  |
|-----------|--|
| AR 75-1   | Malfunctions Involving Ammunition and Explosives |
| AR 385-40 | Accident Reporting and Records                   |

**FORMS**

|              |   |
|--------------|---|
| DA Form 285  | Accident Report                                     |
| DA Form 2028 | Recommended Changes to Publications and Blank Forms |
| SF 361       | Transportation Discrepancy Report                   |
| SF 368       | Product Deficiency Report                           |

**PAMPHLETS**

|               |  |
|---------------|--|
| DA PAM 738-50 | Functional Users Manual for The Army Maintenance Management System (TAMMS) |
|---------------|--|

**TECHNICAL BULLETINS**

|                  |  |
|------------------|--|
| TB 9-1310-253-12 | Operator Information for Cartridge 40mm: Non-Lethal, XM1006 (40mm Sponge Grenade-Modified Government Version) for 40mm M203 Grenade Launcher |
| TB 9-1310-255-12 | Operator Information for 40mm Multiple Rubber Ball (Stinger) Round, 40B And Foam Rubber Multiple Baton Round, 40F                            |

**TECHNICAL MANUALS**

|                    |   |
|--------------------|---|
| TM 3-1040-262-13&P | Operator's, Organizational and Direct Support Maintenance Manual (Including Repair Parts And Special Tools List): Disperser, Riot Control Agent Portable: M33A1   |
| TM 3-1040-287-12&P | Operator's and Unit Maintenance Manual (Including Repair Parts and Special Tools List): Disperser, Riot Control Agent, Mid-Sized: M37   |
| TM 3-1365-204-12   | Operator's and Organizational Maintenance Manual for Disperser and Riot Control Agent, Manually Carried: CR, M36  |
| TM 3-4240-340-10   | Operator's Manual for Chemical-Biological Mask: Combat Vehicle, M42A1   |
| TM 9-1005-303-14   | Operator's, Organizational, Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List): Shotgun, 12 Gage, Winchester Model 1200, Riot Type, 20-inch Barrel W/E |



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**TECHNICAL MANUALS - Continued**

|                    |  |
|--------------------|--|
| TM 9-1300-251-20&P | Unit Maintenance Manual (Including Repair Parts and Special Tools List) for Artillery Ammunition for Guns, Howitzers, Mortars, Recoilless Rifles, and 40mm Grenade Launchers   |
| TM 9-1300-251-34   | Direct Support and General Support Maintenance Manual (Including Repair Parts and Special Tools List) for Artillery Ammunition for Guns, Howitzer, Mortars, Recoilless Rifles and 40mm Grenade Launchers                 |
| TM 9-1305-201-20&P | Organizational Maintenance Manual (Including Repair Parts and Special Tools List) for Small Arms Ammunition to 30mm Inclusive (FSC 1305): 12 Gauge Dummy Cartridge, XM1012 12 Gauge (Point) Round, 12 Gauge (Area) Round |
| TM 9-1330-200-12   | Operator's and Organizational Maintenance Manual for Grenades  |
| TM 9-1330-200-34   | Direct Support and General Support Maintenance Manual for Grenades   |
| TM 9-1330-220-12   | Operator's and Unit Maintenance Manual for Grenades: Sting Ball Hand/12 Gauge Launched Grenade, M84 Diversionary/Flash Bang Stun Hand Grenade  |
| TM 43-0001-29      | Army Ammunition Data Sheets for Grenades   |
| TM 43-0001-38      | Army Ammunition Data Sheets for Demolition Materials   |

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**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**

**MAINTENANCE ALLOCATION CHART (MAC) INTRODUCTION**

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## **INTRODUCTION**

### **The Army Maintenance System MAC**

This introduction provides a general explanation of all maintenance and repair functions authorized at various maintenance levels under the standard Army Maintenance System concept.

The MAC (WP 0035 00) designates overall authority and responsibility for the performance of maintenance functions on the identified end item or component. The application of the maintenance functions to the end item or component shall be consistent with the capacities and capabilities of the designated maintenance levels, which are shown on the MAC in column (4) as:

Unit - includes two subcolumns, C (operator/crew) and O (unit) maintenance.

Direct Support - includes an F subcolumn.

General Support - includes an H subcolumn.

Depot - includes a D subcolumn.

The tools and test equipment requirements (immediately following the MAC) list the tools and test equipment (both special tools and common tool sets) required for each maintenance function as referenced from the MAC.

The remarks (immediately following the tools and test equipment requirements) contain supplemental instructions and explanatory notes for a particular maintenance function.

### **Maintenance Functions**

Maintenance functions are limited to and defined as follows:

1. **Inspect.** To determine the serviceability of an item by comparing its physical, mechanical, and/or electrical characteristics with established standards through examination (e.g., by sight, sound, or feel). This includes scheduled inspection and gagings and evaluation of cannon tubes.
2. **Test.** To verify serviceability by measuring the mechanical, pneumatic, hydraulic, or electrical characteristics of an item and comparing those characteristics with prescribed standards on a scheduled basis, i.e., load testing of lift devices and hydrostatic testing of pressure hoses.
3. **Service.** Operations required periodically to keep an item in proper operating condition; e.g., to clean (includes decontaminate, when required), to preserve, to drain, to paint, or to replenish fuel, lubricants, chemical fluids, or gases. This includes scheduled exercising and purging of recoil mechanisms.
4. **Adjust.** To maintain or regulate, within prescribed limits, by bringing into proper position, or by setting the operating characteristics to specified parameters.

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## INTRODUCTION - Continued

### Maintenance Functions - Continued

5. **Align.** To adjust specified variable elements of an item to bring about optimum or desired performance.
6. **Calibrate.** To determine and cause corrections to be made or to be adjusted on instruments of test, measuring, and diagnostic equipment used in precision measurement. Consists of comparisons of two instruments, one of which is a certified standard of known accuracy, to detect and adjust any discrepancy in the accuracy of the instrument being compared.
7. **Remove/Install.** To remove and install the same item when required to perform service or other maintenance functions. Install may be the act of emplacing, seating, or fixing into position a spare, repair part, or module (component or assembly) in a manner to allow the proper functioning of an equipment or system.
8. **Replace.** To remove an unserviceable item and install a serviceable counterpart in its place. "Replace" is authorized by the MAC and assigned maintenance level is shown as the third position code of the Source, Maintenance and Recoverability (SMR) code.
9. **Repair.** The application of maintenance services, including fault location/troubleshooting, removal/installation, disassembly/assembly procedures, and maintenance actions to identify troubles and restore serviceability to an item by correcting specific damage, fault, malfunction, or failure in a part, subassembly, module (component or assembly), end item, or system.

### NOTE

The following definitions are applicable to the "repair" maintenance function:

Services - Inspect, test, service, adjust, align, calibrate, and/or replace.

Fault location/troubleshooting - The process of investigating and detecting the cause of equipment malfunctioning; the act of isolating a fault within a system or Unit Under Test (ET).

Disassembly/assembly - The step-by-step breakdown (taking apart) of a spare/functional group coded item to the level of its least component, that is assigned as SMR code for the level of maintenance under consideration (i.e., identified as maintenance significant).

Actions - Welding, grinding, riveting, straightening, facing, machining, and/or resurfacing.

10. **Overhaul.** That maintenance effort (service/action) prescribed to restore an item to a completely serviceable/operational condition as required by maintenance standards in appropriate technical publications. Overhaul is normally the highest degree of maintenance performed by the Army. Overhaul does not normally return an item to like new condition.
11. **Rebuild.** Consists of those services/actions necessary for the restoration of unserviceable equipment to a like new condition in accordance with original manufacturing standards. Rebuild is the highest degree of materiel maintenance applied to Army equipment. The rebuild operation includes the act of returning to zero those age measurements (e.g., hours/miles) considered in classifying Army equipment/components.

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## INTRODUCTION - Continued

### Explanation of Columns in the MAC

Column (1) - Group Number. Column (1) lists FGC numbers, the purpose of which is to identify maintenance significant components, assemblies, subassemblies, and modules with the Next Higher Assembly (NHA).

Column (2) - Component/Assembly. Column (2) contains the item names of components, assemblies, subassemblies, and modules for which maintenance is authorized.

Column (3) - Maintenance Function. Column (3) lists the functions to be performed on the item listed in column (2). (For a detailed explanation of these functions refer to "Maintenance Functions" outlined above.)

Column (4) - Maintenance Level. Column (4) specifies each level of maintenance authorized to perform each function listed in column (3), by indicating work time required (expressed as manhours in whole hours or decimals) in the appropriate subcolumn. This work time figure represents the active time required to perform that maintenance function at the indicated level of maintenance. If the number or complexity of the tasks within the listed maintenance function varies at different maintenance levels, appropriate work time figures are to be shown for each level. The work time figure represents the average time required to restore an item (assembly, subassembly, component, module, end item, or system) to a serviceable condition under typical field operating conditions. This time includes preparation time (including any necessary disassembly/assembly time), troubleshooting/fault location time, and quality assurance time in addition to the time required to perform the specific tasks identified for the maintenance functions authorized in the MAC. The symbol designations for the various maintenance levels are as follows:

C - Operator or crew maintenance

O - Unit maintenance

F - Direct support maintenance

L - Specialized repair activity (SRA)

H - General support maintenance

D - Depot maintenance

### NOTE

The "L" maintenance level is not included in column (4) of the MAC. Functions to this level of maintenance are identified by a work time figure in the "H" column of column (4), and an associated reference code is used in the REMARKS column (6). This code is keyed to the remarks and the SRA complete repair application is explained there.

Column (5) - Tools and Equipment Reference Code. Column (5) specifies, by code, those common tool sets (not individual tools), common Test, Measurement and Diagnostic Equipment (TMDE), and special tools, special TMDE and special support equipment required to perform the designated function. Codes are keyed to the entries in the tools and test equipment table.

Column (6) - Remarks Code. When applicable, this column contains a letter code, in alphabetical order, which is keyed to the remarks table entries.

**INTRODUCTION - Continued****Explanation of Columns in the Tools and Test Equipment Requirements**

Column (1) - Tool or Test Equipment Reference Code. The tool or test equipment reference code correlates with a code used in column (5) of the MAC.

Column (2) - Maintenance Level. The lowest level of maintenance authorized to use the tool or test equipment.

Column (3) - Nomenclature. Name or identification of the tool or test equipment.

Column (4) - National Stock Number (NSN). The NSN of the tool or test equipment.

Column (5) - Tool Number. The manufacturer's part number, model number, or type number.

**Explanation of Columns in the Remarks**

Column (1) - Remarks Code. The code recorded in column (6) of the MAC.

Column (2) - Remarks. This column lists information pertinent to the maintenance function being performed as indicated in the MAC.

**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**MAINTENANCE ALLOCATION CHART (MAC)**

**MAINTENANCE ALLOCATION CHART FOR NLCS**

**Table 1. MAC for NLCS .**

| (1)<br>GROUP<br>NUMBER | (2)<br>COMPONENT/ASSEMBLY | (3)<br>MAINTENANCE<br>FUNCTION | (4)<br>MAINTENANCE LEVEL |   |                   |                    | (5)<br>TOOLS AND<br>EQUIPMENT<br>REF CODE | (6)<br>REMARKS<br>CODE |
|------------------------|---------------------------|--------------------------------|--------------------------|---|-------------------|--------------------|---|------------------------|
|                        |                           |                                | UNIT                     |   | DIRECT<br>SUPPORT | GENERAL<br>SUPPORT | DEPOT                                     |                        |
|                        |                           |                                | C                        | O | F                 | H                  | D   |                        |
| 00                     | NON-LETHAL CAPABILITY SET | Inspect                        | X                        | X |                   |                    |   |                        |
|                        |                           | Install                        |                          | X |                   |                    |   | A                      |
|                        |                           | Service                        | X                        |   |                   |                    |   | B                      |
|                        |                           | Replace                        | X                        |   |                   |                    |   | C                      |

**TOOLS AND TEST EQUIPMENT REQUIREMENTS FOR NLCS**

**Table 2. Tools and Test Equipment for NLCS .**

| TOOL OR TEST<br>EQUIPMENT<br>REF CODE | MAINTENANCE<br>LEVEL | NOMENCLATURE | NATIONAL<br>STOCK<br>NUMBER | TOOL NUMBER |
|---------------------------------------|----------------------|--------------|-----------------------------|-------------|
|                                       |                      | N/A          |                             |             |

**REMARKS FOR NLCS**

**Table 3. Remarks for NLCS .**

| REMARKS<br>CODE | REMARKS   |
|-----------------|---|
| A               | Assemble non-ballistic riot body shield and ballistic body shield upon receipt. |
| B               | Service is cleaning components of the NLCS.                                     |
| C               | For NLCS components requiring lamps and/or batteries.                           |

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**OPERATOR AND UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**INTRODUCTION**

---

## **SCOPE**

This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of Operator and Unit maintenance of the Nonlethal Capabilities Set. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

## **GENERAL**

In addition to the Introduction work package, this RPSTL is divided into the following work packages.

1. Repair Parts List Work Packages. Work packages containing lists of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. These work packages also include parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Sending units, brackets, filters, and bolts are listed with the component they mount on. Bulk materials are listed by item name in FIG. BULK at the end of the work packages. Repair parts kits are listed separately in their own functional group and work package. Repair parts for reparable special tools are also listed in a separate work package. Items listed are shown on the associated illustrations.
2. Special Tools List Work Packages. Work packages containing lists of special tools, special TMDE, and special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in the DESCRIPTION AND USABLE ON CODE (UOC) column). Tools that are components of common tool sets and/or Class VII are not listed.
3. Cross-Reference Indexes Work Packages. There are two cross-reference indexes work packages in this RPSTL: the National Stock Number (NSN) Index work package, and the Part Number (P/N) Index work package. The National Stock Number Index work package refers you to the figure and item number. The Part Number Index work package refers you to the figure and item number.



## EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES

ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.

SMR CODE (Column (2)). The SMR code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

| <u>Source Code</u>                        | <u>Maintenance Code</u>   |   | <u>Recoverability Code</u>  |
|---|---|---|---|
| <u>xx</u>                                 |   | <u>xx</u>   | <u>x</u>  |
| 1st two positions:<br>How to get an item. | 3rd position:<br>Who can install,<br>replace, or use<br>the item. | 4th position:<br>Who can do<br>complete repair*<br>on the item. | 5th position:<br>Who determines<br>disposition action<br>on unserviceable<br>items. |

\*Complete Repair: Maintenance capacity, capability, and authority to perform all corrective maintenance tasks of the "Repair" function in a use/user environment in order to restore serviceability to a failed item.

Source Code. The source code tells you how you get an item needed for maintenance, repair, or overhaul of an end item/equipment. Explanations of source codes follow:

| <u>Source Code</u> | <u>Application/Explanation</u> |
|--------------------|--------------------------------|
|--------------------|--------------------------------|

|  |   |
|--|---|
| PA<br>PB<br>PC<br>PD<br>PE<br>PF<br>PG | Stock items; use the applicable NSN to requisition/request items with these source codes. They are authorized to the level indicated by the code entered in the 3rd position of the SMR code. |
|--|---|

### NOTE

Items coded PC are subject to deterioration.

|                |   |
|----------------|---|
| KD<br>KF<br>KB | Items with these codes are not to be requested/requisitioned individually. They are part of a kit which is authorized to the maintenance level indicated in the 3rd position of the SMR code. The complete kit must be requisitioned and applied. |
|----------------|---|

|  |  |
|--|--|
| MO-Made at unit/<br>AVUM level<br>MF-Made at DS/<br>AVIM level<br>MH-Made at GS<br>level<br>ML-Made at SRA<br>MD-Made at depot | Items with these codes are not to be requisitioned/requested individually. They must be made from bulk material which is identified by the P/N in the DESCRIPTION AND USABLE ON CODE (UOC) column and listed in the bulk material group work package of the RPSTL. If the item is authorized to you by the 3rd position code of the SMR code, but the source code indicates it is made at higher level, order the item from the higher level of maintenance. |
|--|--|

## EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

| <u>Source Code</u>   | <u>Application/Explanation</u>   |
|--|--|
| AO-Assembled by unit/AVUM level<br>AF-Assembled by DS/AVIM level<br>AH-Assembled by GS level<br>AL-Assembled by SRA<br>AD-Assembled by depot | Items with these codes are not to be requested/requisitioned individually. The parts that make up the assembled item must be requisitioned or fabricated and assembled at the level of maintenance indicated by the source code. If the 3rd position of the SMR code authorizes you to replace the item, but the source code indicates the item is assembled at a higher level, order the item from the higher level of maintenance. |
| XA   | Do not requisition an "XA" coded item. Order the next higher assembly. (Refer to NOTE below.)  |
| XB   | If an item is not available from salvage, order it using the CAGEC and P/N.  |
| XC   | Installation drawings, diagrams, instruction sheets, field service drawings; identified by manufacturer's P/N.   |
| XD   | Item is not stocked. Order an XD-coded item through normal supply channels using the CAGEC and P/N given, if no NSN is available.  |

### NOTE

Cannibalization or controlled exchange, when authorized, may be used as a source of supply for items with the above source codes except for those items source coded "XA" or those aircraft support items restricted by requirements of AR 750-1.

Maintenance Code. Maintenance codes tell you the level(s) of maintenance authorized to use and repair support items. The maintenance codes are entered in the third and fourth positions of the SMR code as follows:

Third Position. The maintenance code entered in the third position tells you the lowest maintenance level authorized to remove, replace, and use an item. The maintenance code entered in the third position will indicate authorization to the following levels of maintenance:

| <u>Maintenance Code</u> | <u>Application/Explanation</u>   |
|-------------------------|--|
| C -                     | Crew or operator maintenance done within unit/AVUM maintenance.        |
| O -                     | Unit level/AVUM maintenance can remove, replace, and use the item.     |
| F -                     | Direct support/AVIM maintenance can remove, replace, and use the item. |
| H -                     | General support maintenance can remove, replace, and use the item.     |
| L -                     | Specialized repair activity can remove, replace, and use the item.     |
| D -                     | Depot can remove, replace, and use the item.                           |

## EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

Fourth Position. The maintenance code entered in the fourth position tells you whether or not the item is to be repaired and identifies the lowest maintenance level with the capability to do complete repair (perform all authorized repair functions).

### NOTE

Some limited repair may be done on the item at a lower level of maintenance, if authorized by the Maintenance Allocation Chart (MAC) and SMR codes.

#### **Maintenance Code**

#### **Application/Explanation**

- O - Unit/AVUM is the lowest level that can do complete repair of the item.
- F - Direct support/AVIM is the lowest level that can do complete repair of the item.
- H - General support is the lowest level that can do complete repair of the item.
- L - Specialized repair activity is the lowest level that can do complete repair of the item.
- D - Depot is the lowest level that can do complete repair of the item.
- Z - Nonreparable. No repair is authorized.
- B - No repair is authorized. No parts or special tools are authorized for maintenance of "B" coded item. However, the item may be reconditioned by adjusting, lubricating, etc., at the user level.

Recoverability Code. Recoverability codes are assigned to items to indicate the disposition action on unserviceable items. The recoverability code is shown in the fifth position of the SMR code as follows:

#### **Recoverability Code**

#### **Application/Explanation**

- Z - Nonreparable item. When unserviceable, condemn and dispose of the item at the level of maintenance shown in the third position of the SMR code.
- O - Repairable item. When uneconomically repairable, condemn and dispose of the item at the unit level.
- F - Repairable item. When uneconomically repairable, condemn and dispose of the item at the direct support level.
- H - Repairable item. When uneconomically repairable, condemn and dispose of the item at the general support level.
- D - Repairable item. When beyond lower level repair capability, return to depot. Condemnation and disposal of item are not authorized below depot level.
- L - Repairable item. Condemnation and disposal not authorized below Specialized Repair Activity (SRA).
- A - Item requires special handling or condemnation procedures because of specific reasons (such as precious metal content, high dollar value, critical material, or hazardous material). Refer to appropriate manuals/directives for specific instructions.

## EXPLANATION OF COLUMNS IN THE REPAIR PARTS LIST AND SPECIAL TOOLS LIST WORK PACKAGES - Continued

NSN (Column (3)). The NSN for the item is listed in this column.

CAGEC (Column (4)). The Commercial and Government Entity Code (CAGEC) is a five-digit code which is used to identify the manufacturer, distributor, or Government agency/activity that supplies the item.

PART NUMBER (Column (5)). Indicates the primary number used by the manufacturer (individual, company, firm, corporation, or Government activity), which controls the design and characteristics of the item by means of its engineering drawings, specifications, standards, and inspection requirements to identify an item or range of items.

### NOTE

When you use an NSN to requisition an item, the item you receive may have a different P/N from the number listed.

DESCRIPTION AND USABLE ON CODE (UOC) (Column (6)). This column includes the following information:

1. The federal item name, and when required a minimum description to identify the item.
2. P/Ns of bulk materials are referenced in this column in the line entry to be manufactured or fabricated.
3. Hardness Critical Item (HCI). A support item that provides the equipment with special protection from electromagnetic pulse (EMP) damage during a nuclear attack.
4. The statement END OF FIGURE appears just below the last item description in column (6) for a given figure in both the repair parts list and special tools list work packages.

QTY (Column (7)). The QTY (quantity per figure) column indicates the quantity of the item used in the breakout shown on the illustration/figure, which is prepared for a functional group, subfunctional group, or an assembly. A "V" appearing in this column instead of a quantity indicates that the quantity is variable and quantity may change from application to application.

## EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS

1. National Stock Number (NSN) Index Work Package.

STOCK NUMBER Column. This column lists the NSN in the National item identification number (NIIN) sequence. The NIIN consists of the last nine digits of the NSN.

\_\_\_\_\_  
NSN  
(e.g., 5385-01-574-1476)  
\_\_\_\_\_  
NIIN

When using this column to locate an item, ignore the first four digits of the NSN. However, the complete NSN should be used when ordering items by stock number.

FIG. Column. This column lists the number of the figure where the item is identified/located. The figures are in numerical order in the repair parts list and special tools list work packages.

ITEM Column. The item number identifies the item associated with the figure listed in the adjacent FIG. column. This item is also identified by the NSN listed on the same line.

## EXPLANATION OF CROSS-REFERENCE INDEXES WORK PACKAGES FORMAT AND COLUMNS - Continued

2. Part Number (P/N) Index Work Package. P/Ns in this index are listed in ascending alphanumeric sequence (vertical arrangement of letter and number combinations which places the first letter or digit of each group in order "A" through "Z," followed by the numbers "0" through "9" and each following letter or digit in like order).

PART NUMBER Column. Indicates the P/N assigned to the item.

FIG. Column. This column lists the number of the figure where the item is identified/located in the repair parts list and special tools list work packages.

ITEM Column. The item number is the number assigned to the item as it appears in the figure referenced in the adjacent figure number column.

## SPECIAL INFORMATION

The UOC appears in the lower left corner of the Description Column heading. Usable on codes are shown as "UOC: ..." in the Description Column (justified left) on the first line under the applicable item/nomenclature. Uncoded items are applicable to all models. Identification of the UOCs used in the RPSTL are:

| <u>Code</u> | <u>Used On</u> |
|-------------|----------------|
| TBD         | TBD            |

## HOW TO LOCATE REPAIR PARTS

### 1. When NSNs or P/Ns Are Not Known.

First. Using the table of contents, determine the assembly group to which the item belongs. This is necessary since figures are prepared for assembly groups and subassembly groups, and lists are divided into the same groups.

Second. Find the figure covering the functional group or the subfunctional group to which the item belongs.

Third. Identify the item on the figure and note the number(s).

Fourth. Look in the repair parts list work packages for the figure and item numbers. The NSNs and part numbers are on the same line as the associated item numbers.

### 2. When NSN Is Known.

First. If you have the NSN, look in the STOCK NUMBER column of the NSN index work package. The NSN is arranged in NIIN sequence. Note the figure and item number next to the NSN.

Second. Turn to the figure and locate the item number. Verify that the item is the one you are looking for.

### 3. When P/N is Known.

First. If you have the P/N and not the NSN, look in the PART NUMBER column of the P/N index work package. Identify the figure and item number.

Second. Look up the item on the figure in the applicable repair parts list work package.

## END OF WORK PACKAGE

---

**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**REPAIR PARTS LIST**

---

**NOTE**

Before proceeding with Repair Parts List, see Introduction to RPSTL (WP 0036 00).



FIGURE 1. (SHEET 1 OF 5)

| (1)<br>ITEM<br>NO | (2)<br>SMR<br>CODE | (3)<br>NSN       | (4)<br>CAGEC | (5)<br>PART<br>NUMBER | (6)<br>DESCRIPTION AND USABLE ON<br>CODES (UOC)<br>GROUP 00<br>FIGURE 1. (SHEET 1 OF 5)   | (7)<br>QTY |
|-------------------|--------------------|------------------|--------------|-----------------------|---|------------|
| 1                 | PAOOO              | 8465-01-467-0721 | 01365        | PD/CO-99-14           | FACE SHIELD: ..... 200<br>Non-ballistic Type 2, (Riot), Scratch<br>Resistant  |            |
| 2                 | PAOOO              | TBD              | 0N995        | PMBS-9                | BODY SHIELD: ..... 150<br>Non-ballistic, W/#2 Cross Tip 4 In.<br>Screwdriver  |            |
| 3                 | PAOOO              | 8465-01-467-0740 | 01365        | PD/CO-99-12           | GUARD, SHIN: ..... 30<br>Non-ballistic, (Riot) Medium   |            |
| 3                 | PAOOO              | 8465-01-467-0744 | 01365        | PD/CO-99-12           | GUARD, SHIN: ..... 60<br>Non-ballistic, (Riot) Large  |            |
| 3                 | PAOOO              | 8465-01-467-0750 | 01365        | PD/CO-99-12           | GUARD, SHIN: ..... 60<br>Non-ballistic, (Riot) Extra Large  |            |
| 4                 | PAOOO              | 8470-01-467-0754 | 01365        | PD/CO-99-15           | FACE SHIELD: ..... 10<br>Ballistic  |            |
| 5                 | PAOOO              | 8470-01-467-0757 | 01365        | PD/CO-99-17           | BODY SHIELD: ..... 10<br>Ballistic,   |            |
| 6                 | TBD                | TBD              | 0N995        | PT1220                | SHIN GUARD: Ballistic, Riot ..... 2<br>Rigid, Medium  |            |
| 6                 | TBD                | TBD              | 0N995        | PT1220                | SHIN GUARD: Ballistic, Riot ..... 4<br>Rigid, Large   |            |
| 6                 | TBD                | TBD              | 0N995        | PT1220                | SHIN GUARD: Ballistic, Riot ..... 4<br>Rigid, Extra Large   |            |
| 7                 | TBD                | TBD              | 0N995        | SF6SL                 | SHIELD, LIGHT: For Ballistic ..... 10<br>Body Shield, Requires (2) 3V Lithium<br>Batteries (See Expendable and Durable<br>Items List, Item 6) |            |

END OF FIGURE





FIGURE 1. (SHEET 2)

| (1)<br>ITEM<br>NO | (2)<br>SMR<br>CODE | (3)<br>NSN       | (4)<br>CAGEC | (5)<br>PART<br>NUMBER | (6)<br>DESCRIPTION AND USABLE ON<br>CODES (UOC)<br>GROUP 00<br>FIGURE 1. (SHEET 2)  | (7)<br>QTY |
|-------------------|--------------------|------------------|--------------|-----------------------|---|------------|
| 8                 | TBD                | TBD              | 0N995        | MON2800               | BATON, WOODEN:.....   | 200        |
| 9                 | TBD                | TBD              | 0N995        | AT1A2M                | 36 In. Lg. w/Grommet<br>PORTABLE BULLHORN:.....   | 10         |
| 10                | TBD                | TBD              | 0N995        | AAPPB35W1             | Requires (8) "C" Cell Alkaline Batteries<br>(See Expendable & Durable Items<br>List, Item 2)<br>BULLHORN, GROUND MOUNTED:....   | 8          |
| 11                | PAOZZ              | 5996-01-381-9012 | 61318        | 1000-3028             | Requires (1) 12V Rechargeable Lead Acid<br>Battery (See Expendable & Durable Items<br>List, Item 4) and comes with: STAND/<br>(TRIPOD) (0N995) AASS450, and<br>MICROPHONE, wireless (0N995)<br>AAPBWH10001 that requires (1) AA Alka-<br>line Battery (See Expendable & Durable<br>Items List, Item 3)<br>AMPLIFIER, AUDIO FREQUENCY: ..... | 200        |
| 12                | TBD                | TBD              | 0N995        | SF6P                  | Individual Voice Amplification System<br>Requires (1) 9V Alkaline Battery (See<br>Expendable & Durable Items List, Item 5)<br>INDIVIDUAL HIGH INTENSITY .....   | 15         |
| 13                | TBD                | TBD              | 0N995        | ATIEATAVLFP6POD       | LIGHT: Requires (2) 3V Lithium Batteries<br>(See Expendable & Durable Items List, Item<br>6)<br>BELT CARRY POUCH: .....   | 15         |
| 14                | TBD                | TBD              | 0N995        | XENNCUSA              | HIGH INTENSITY LIGHT:.....  | 8          |
| 15                | TBD                | TBD              | 0N995        | NIKFLEXCUFF           | Consisting Of: Complete Filter, Waterproof<br>Case, Carrying Strap, 10 Ft Cord, 12 V,<br>Charging Unit (High Intensity Light Con-<br>tains Sealed Lead Acid Rechargeable Bat-<br>tery) (See Expendable and Durable Items<br>List, Item 4)<br>DISPOSABLE RESTRAINT .....   | 1000       |
| 16                | TBD                | TBD              | 0N995        | ATIRSC3               | SYSTEM (DRS): Forearm/ankle Cuffs (Sin-<br>gle) W/Two Cutters<br>CALTROP: .....   | 250        |
|                   |                    |                  |              |                       | Nesting Design for Storage, W/String Holes<br>for Storage, 550 Cord (See Expendable &<br>Durable List, Item 9), or Communication<br>Wire (See Expendable & Durable, Item 10)<br><b>END OF FIGURE</b>  |            |

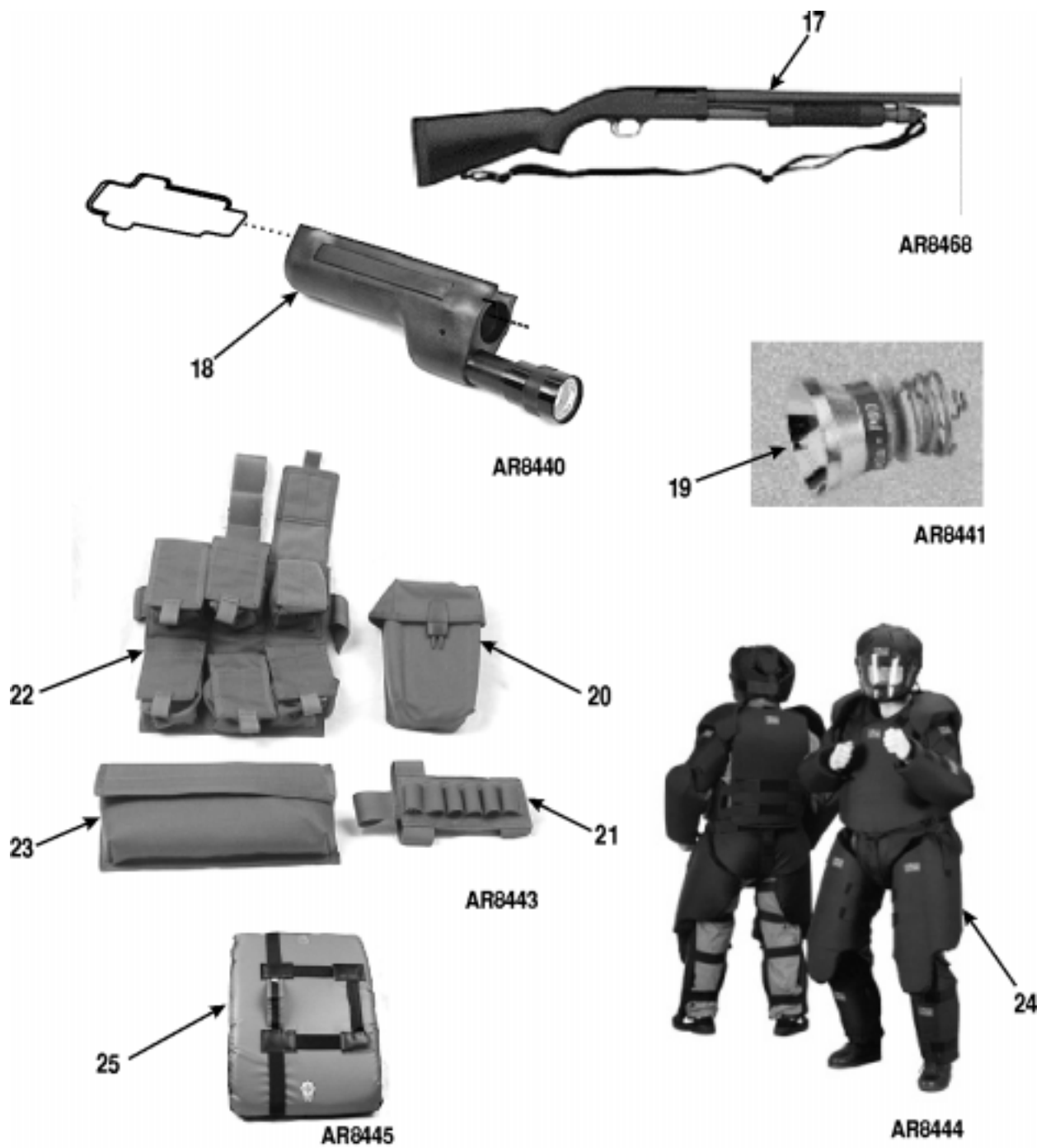


FIGURE 1. (SHEET 3)

| (1)<br>ITEM<br>NO | (2)<br>SMR<br>CODE | (3)<br>NSN       | (4)<br>CAGEC | (5)<br>PART<br>NUMBER | (6)<br>DESCRIPTION AND USABLE ON<br>CODES (UOC)<br>GROUP 00<br>FIGURE 1. (SHEET 3)  | (7)<br>QTY |
|-------------------|--------------------|------------------|--------------|-----------------------|---|------------|
| 17                | TBD                | 1005-01-295-1832 | 41758        | 50518                 | SHOTGUN: 12 Gauge .....   | 50         |
| 18                | TBD                | TBD              | 0N995        | SF622                 | 12 GAUGE SHOTGUN LIGHT: .....<br>w/Bracket and Installation Tool, Requires<br>(2) 3V Lithium Batteries (See Expendable<br>and Durable Items List, Item 6) | 50         |
| 19                | TBD                | TBD              | 0N995        | SFP60                 | LAMP: Blue Band, 6V, P60.....   | 15         |
| 20                | TBD                | TBD              | 0N995        | ATIEAUPMS             | Use With Items 7, 12, And 18<br>12 GAUGE UTILITY POUCH: .....   | 50         |
| 21                | TBD                | TBD              | 0N995        | ATISSSCQTR            | (25 Round)<br>12 GAUGE BUTTCUFF CARRIER: .....  | 50         |
| 22                | TBD                | TBD              | 0N995        | ATISASSDD60D          | (6 Round)<br>POUCH: for Diversionary/Rubber.....  | 25         |
| 23                | TBD                | TBD              | 0N995        | ATIEA40MM6            | Ball or Flash Grenade<br>POUCH: 40MM.....   | 100        |
| 24                | TBD                | TBD              | 0N995        | AAT1FS333             | RIOT TRAINING SUIT .....  | 4          |
|                   |                    |                  |              |                       | Consisting of the Following: Chest and<br>Back, Shoulders, Biceps, Forearms, Groin<br>and Buttocks, Thighs, Shins, Helmet,<br>Gloves and Carry Bag        |            |
| 25                | TBD                | TBD              | 0N995        | MONUTB                | RIOT TRAINING BAG:.....<br>Punch/Strike Bag   | 10         |
| END OF FIGURE     |                    |                  |              |                       |   |            |



FIGURE 1. (SHEET 4)

| (1)<br>ITEM NO | (2)<br>SMR CODE | (3)<br>NSN       | (4)<br>CAGEC | (5)<br>PART NUMBER            | (6)<br>DESCRIPTION AND USABLE ON<br>CODES (UOC)<br>GROUP 00<br>FIGURE 1. (SHEET 4)  | (7)<br>QTY |
|----------------|-----------------|------------------|--------------|-------------------------------|---|------------|
| 26             | TBD             | 1365-00-283-9046 | 81361        | C116-6-271                    | DISPERSER AND RIOT CONTROL .....<br>AGENT,MANUALLY CARRIED: M36   | 200        |
| 27             | PAOZZ           | TBD              | 0N995        | ATIEAMKK                      | POUCH: .....<br>for M36 and MK4 Disperser   | 200        |
| 28             | TBD             | 1365-01-406-3275 | 0N995        | MK-4 INERT TRAIN-<br>ING UNIT | DISPERSER RIOT CONTROL.....<br>AGENT MANUALLY CARRIED: MK4,<br>Inert, Requires Pouch  | 200        |
| 29             | TBD             | 1040-00-148-9824 | 81361        | E116-3-121                    | DISPENSOR RIOT .....<br>CONTROL, AGENT, PORTABLE:<br>M33A1 Consists of Gas Cylinder (Agent<br>Container Assembly), an Air Pressure<br>Assembly, Gun and Hose Assembly,<br>Multijet Spray Unit, and Check Valve<br>Assembly, Requires M254 Service Kit | 4          |
| 30             | TBD             | 1040-01-463-0157 | 81361        | 116-3-160                     | DISPERSER,RIOT CONTROL.....<br>AGENT MANUALLY CARRIED: Mid-<br>sized, M37   | 15         |
| 31             |                 | 1365-01-072-3688 | 81361        | EA-R-1136                     | RIOT CONTROL AGENT:.....<br>CR Solution, 3-gallon, Requires Refill Kit<br>Which Includes Transfer Tube, Transfer<br>Bottle And Funnel (See Expendable And<br>Durable Items List, Item 11)   | 20         |

END OF FIGURE

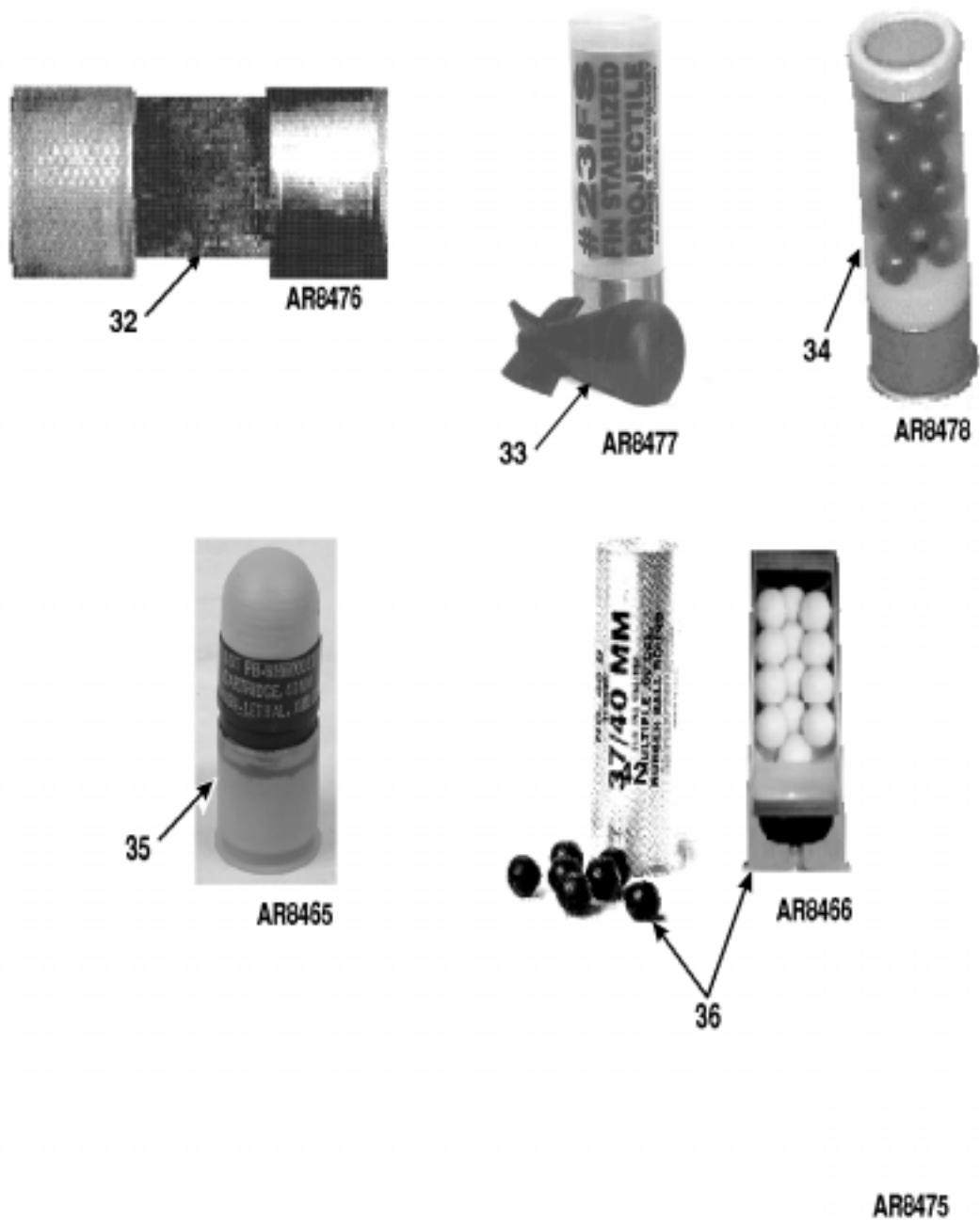


FIGURE 1. (SHEET 5)

| (1)<br>ITEM<br>NO | (2)<br>SMR<br>CODE | (3)<br>NSN       | (4)<br>CAGEC | (5)<br>PART<br>NUMBER | (6)<br>DESCRIPTION AND USABLE ON<br>CODES (UOC)<br>GROUP 00<br>FIGURE 1. (SHEET 5)    | (7)<br>QTY |
|-------------------|--------------------|------------------|--------------|-----------------------|---|------------|
| 32                | TBD                | 1305-01-380-3255 | 80236        | P040850C              | DUMMY CARTRIDGE, 12 GAUGE: .....<br>MK242, MOD 0, INERT USED FOR<br>TRAINING          | 250        |
| 33                | TBD                | 1305-01-470-2405 | 19200        | 12991637              | CARTRIDGE, 12 GAGE .....<br>SHOTGUN, NON-LETHAL: XM1012<br>12 GAUGE (POINT) ROUND     | 3,000      |
| 34                | TBD                | 1305-01-470-2139 | 19200        | 12982926              | CARTRIDGE, 12 GAGE .....<br>SHOTGUN, NON-LETHAL: XM1013<br>12 GUAGE (AREA) ROUND,     | 3,000      |
| 35                | TBD                | 1310-01-452-1190 | 19200        | 12977456              | 40MM MULTIPLE .....<br>RUBBER BALL (STINGER) ROUND: 40B                               | 2,400      |
| 36                | TBD                | 1310-00-X96-8808 | 19200        | 12977305              | CARTRIDGE, 40 MILLIMETER, .....<br>NON-LETHAL: 40B, CROWD DIS-<br>PERSAL ROUND (AREA) | 2,400      |
| END OF FIGURE     |                    |                  |              |                       |   |            |



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**OPERATOR AND UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**NATIONAL STOCK NUMBER INDEX**

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**NOTE**

Before proceeding with National Stock Number Index, see Introduction to RPSTL (WP 0036 00).

| <b>STOCK NUMBER</b> | <b>FIG.</b> | <b>ITEM</b> |
|---------------------|-------------|-------------|
| 1040-00-148-9824    | 1           | 29          |
| 1365-00-283-9046    | 1           | 26          |
| 1365-01-072-3688    | 1           | 31          |
| 1005-01-295-1832    | 1           | 17          |
| 1305-01-380-3255    | 1           | 32          |
| 5996-01-381-9012    | 1           | 11          |
| 1365-01-406-3275    | 1           | 28          |
| 1310-01-452-1190    | 1           | 35          |
| 1040-01-463-0157    | 1           | 30          |
| 8465-01-467-0721    | 1           | 1           |
| 8465-01-467-0740    | 1           | 3           |
| 8465-01-467-0744    | 1           | 3           |
| 8465-01-467-0750    | 1           | 3           |
| 8470-01-467-0754    | 1           | 4           |
| 8470-01-467-0757    | 1           | 5           |
| 1305-01-470-2139    | 1           | 34          |
| 1305-01-470-2405    | 1           | 33          |

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**UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**PART NUMBER INDEX**

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**NOTE**

Before proceeding with Part Number Index, see Introduction to RPSTL (WP 0036 00).

| <b>PART NUMBER</b>       | <b>FIG.</b> | <b>ITEM</b> |
|--------------------------|-------------|-------------|
| AAPPB35W1                | 1           | 10          |
| AAT1FS333                | 1           | 24          |
| AT1A2M                   | 1           | 9           |
| AT1EATAVLFP6POD          | 1           | 13          |
| AT1ASSDD60D              | 1           | 22          |
| AT1EAMKK                 | 1           | 27          |
| AT1EAUPMS                | 1           | 20          |
| AT1EA40MM6               | 1           | 23          |
| ATIRSC3                  | 1           | 16          |
| ATISSSCQTR               | 1           | 21          |
| C116-6-271               | 1           | 26          |
| EA-R-1136                | 1           | 31          |
| E116-3-121               | 1           | 29          |
| MK-4 INERT TRAINING UNIT | 1           | 28          |
| MONUTB                   | 1           | 25          |
| MON2800                  | 1           | 8           |
| NIKFLEXCUFF              | 1           | 15          |
| PD/CO-99-12              | 1           | 3           |
| PD/CO-99-12              | 1           | 3           |
| PD/CO-99-12              | 1           | 3           |
| PD/CO-99-14              | 1           | 1           |
| PD/CO-99-15              | 1           | 4           |
| PD/CO-99-17              | 1           | 5           |
| PO4085OC                 | 1           | 32          |
| SF6P                     | 1           | 12          |
| SF6P60                   | 1           | 19          |
| SF6SL                    | 1           | 7           |
| SF622                    | 1           | 18          |
| XENNCCUSA                | 1           | 14          |
| 116-3-160                | 1           | 30          |
| 1000-3028                | 1           | 11          |
| 50518                    | 1           | 17          |
| 12982926                 | 1           | 34          |

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**OPERATOR MAINTENANCE  
NON-LETHAL CAPABILITY SET  
(NSN TBD)  
COMPONENTS OF END ITEM (COEI) AND BASIC ISSUE ITEMS (BII) LISTS**

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Not applicable.

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**OPERATOR MAINTENANCE  
NON-LETHAL CAPABILITY SET  
(NSN TBD)  
ADDITIONAL AUTHORIZATION LIST (AAL)**

---

## INTRODUCTION

### Scope

This work package lists additional items you are authorized for the support of the NLCS.

### General

This list identifies items that do not have to accompany the NLCS and that do not have to be turned in with it. These items are all authorized to you by CTA, MTOE, TDA, or JTA.

### Explanation of Columns in the AAL

Column (1) - National Stock Number (NSN). Identifies the stock number of the item to be used for requisitioning purposes.

Column (2) - Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). Identifies the Federal item name (in all capitals) followed by a minimum description when needed. The last line below the description is the CAGEC (in parentheses) and the part number.

Column (3) - Usable On Code. When applicable, gives you a code if the item you need is not the same for different models of equipment. Column (4) - Unit of Measure (U/M). Indicates the physical measurement or count of the item as issued per the National Stock Number shown in column (1).

Column (5) - Qty Recm. Indicates the quantity recommended.

## ADDITIONAL AUTHORIZATION LIST

**Table 1. Additional Authorization List .**

| <b>(1)</b><br><br><b>NATIONAL<br/>STOCK<br/>NUMBER</b> | <b>(2)</b><br><br><b>DESCRIPTION, CAGEC, AND PART NUMBER</b> | <b>(3)</b><br><br><b>USABLE<br/>ON CODE</b> | <b>(4)</b><br><br><b>U/M</b> | <b>(5)</b><br><br><b>QTY<br/>RECM</b> |
|--|--|---|------------------------------|---------------------------------------|
| 1005-01-295-1832                                       | SHOTGUN: 12 Gauge<br>(41758) 50518                           |   | EA                           | 50                                    |



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**OPERATOR AND UNIT MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**EXPENDABLE AND DURABLE ITEMS LIST**

---

## **INTRODUCTION**

### **Scope**

This work package lists expendable and durable items that you will need to operate and maintain The Non-Lethal Capability Set. This list is for information only and is not authority to requisition the listed items. These items are authorized to you by CTA 50-970, Expendable/Durable Items (Except Medical, Class V Repair Parts, and Heraldic Items), or CTA 8-100, Army Medical Department Expendable/Durable Items.

### **Explanation of Columns in the Expendable/Durable Items List**

Column (1) - Item Number. This number is assigned to the entry in the list and is referenced in the narrative instructions to identify the item (e.g., Use brake fluid (item 5, WP 0098 00)).

Column (2) - Level. This column identifies the lowest level of maintenance that requires the listed item. (C = Operator/Crew, O = Unit, F = Direct Support, H = General Support, D = Depot).

Column (3) - National Stock Number (NSN). This is the NSN assigned to the item which you can use to requisition it.

Column (4) - Item Name, Description, Commercial and Government Entity Code (CAGEC), and Part Number (P/N). This column provides the other information you need to identify the item.

Column (5) - Unit of Measure (U/M). This code shows the physical measurement or count of an item, such as gallon, dozen, gross, etc.

**EXPENDABLE AND DURABLE ITEMS LIST****Table 1. Expendable and Durable Items List .**

| (1)<br><br>ITEM<br>NUMBER | (2)<br><br>LEVEL | (3)<br><br>NATIONAL<br>STOCK<br>NUMBER | (4)<br><br>ITEM NAME, DESCRIPTION, CAGEC, PART NUMBER   | (5)<br><br>U/M |
|---------------------------|------------------|--|---|----------------|
| 1                         | O                | 6640-00-063-7872                       | BATTERY: for Light Kit<br>(0N995) D123A   | EA             |
| 2                         | O                |  | BATTERY: "C" Cell Batteries, for Portable Bullhorn<br>(0N995) BNCCELLS  | EA             |
| 3                         | O                |  | BATTERY: AA Alkaline Battery, used w/wireless microphone<br>(0N995)   | EA             |
| 4                         | O                |  | BATTERY: 12V rechargeable lead acid battery used on High Intensity<br>Light<br>(0N995)  | EA             |
| 5                         | O                |  | BATTERY: 9V Alkaline battery used with ground mounted bullhorn,<br>amplifier, audio frequency<br>(0N995)                              | EA             |
| 6                         | O                |  | BATTERY: 3V, lithium batteries used w/Shield, Light, Individual<br>High Intensity Flashlight and Light for 12 Gage Shotgun<br>(0N995) | EA             |
| 7                         | O                |  | CORD: 550<br>(XXXXXX)   | EA             |
| 8                         | O                |  | CORD: communication wire<br>(XXXXXX)  | EA             |
| 9                         | O                |  | FUNNEL, COMMON, LABORATORY:<br>(81349) MIL-F-36748  | EA             |
| 10                        | O                |  | LAMP: 6V, replacement bulb for Individual High Intensity Light<br>(0N995)   | EA             |
| 11                        | O                |  | WIPES:  | LB             |

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**OPERATOR MAINTENANCE**  
**NON-LETHAL CAPABILITY SET**  
**(NSN TBD)**  
**AMMUNITION INFORMATION**

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**INITIAL SETUP:**

**References**

TB 9-1310-255-12  
 TM 9-1005-303-14  
 TM 9-1010-221-10  
 TM 9-1300-251-20&P  
 TM 9-1300-251-34

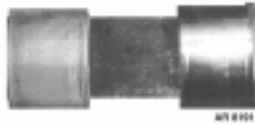
**References - Continued**

TM 9-1330-200-12  
 TM 9-1330-200-34  
 TM 43-0001-28  
 TM 43-0001-29

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**AMMUNITION FOR 12 GAUGE SHOTGUN**

**Dummy Cartridge, 12-Gauge**



12-gauge dummy cartridge is used for familiarization and training purposes and will be appropriately marked.

**12 Gauge Dummy Cartridge:**

|                                |  |
|--------------------------------|--|
| NSN.....                       | 1305-01-380-3255                         |
| Maximum range .....            | NA                                       |
| Maximum effective range .....  | NA                                       |
| Velocity .....                 | NA                                       |
| UNO serial number .....        | 0012                                     |
| UNO proper shipping name ..... | CARTRIDGES FOR WEAPONS, INERT PROJECTILE |
| Packing quantity.....          | 250 per set                              |

**12 Gauge (Point Control) Round, XM1012****WARNING**

Beyond 20 meters the projectile loses accuracy and may no longer have the velocity required to stun an individual.

Shots fired at subjects closer than 10 meters or shots striking the head or groin may cause serious injury or death.



The point target cartridge round gives the soldier a capability to stun individuals by delivering a strong blow to the body without penetrating the body. This munition fills a wide range of possible non-lethal weapons applications. In crowd control it gives a soldier, convoy or crowd control formation a multi-shot non-lethal capability that can be used to break contact, enforce a buffer zone (stand off distance) with a violent crowd, or to stun an individual threat for possible detention by snatch teams. It can also provide EPW facilities and US military detention facilities with similar capabilities. The round is designed to be fired at center mass of an adult subject at ranges between 10 meters and 20 meters.

**12 Gauge (Point Control) Round, XM1012:**

|               |                  |
|---------------|------------------|
| NSN.....      | 1305-01-470-2405 |
| Model .....   | XM1012           |
| Weight .....  | 0.344 lb         |
| Length .....  | 2.45 in.         |
| Diameter..... | 0.32 in.         |
| Cube .....    | 0.006 cu ft      |

**Performance:**

|                              |                                     |
|------------------------------|-------------------------------------|
| Velocity.....                | 500 fps                             |
| Maximum range .....          | 250 ft (76.3 m)/Between 10 and 20 m |
| Maximum effective range..... | 100 ft (18.3 m)/30.5 m              |

**Packaging:**

|                |             |
|----------------|-------------|
| Quantity ..... | 3260        |
| Weight.....    | 55 lb       |
| Cube.....      | 0.899 cu ft |

|                                |                        |
|--------------------------------|------------------------|
| DODAC.....                     | 1305-AZ14              |
| UNO serial number .....        | 0012                   |
| UNO proper shipping name ..... | CARTRIDGES FOR WEAPONS |

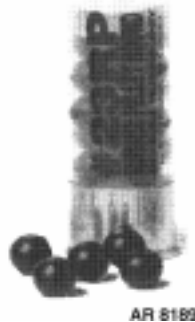
**Shipping and Storage Data:**

|  |                       |
|--|-----------------------|
| Quantity distance class/storage compatibility group..... | 1.4S                  |
| Storage code .....                                       | Class V               |
| DOT shipping class .....                                 | C                     |
| DOT designation .....                                    | SMALL ARMS AMMUNITION |
| Packing quantity.....                                    | 3,000 per set         |

**12 Gauge (Area) Round, XM1013****WARNING**

Beyond 20 meters the projectile loses accuracy and may no longer have the velocity required to stun an individual.

Shots fired at subjects closer than 10 meters or shots striking the head or groin may cause serious injury or death.



The area target cartridge gives the soldier a capability to stun/deter two to three people by delivering a strong blow to the body without penetrating the body. This munition fills a wide range of possible non-lethal weapons applications. In crowd control it gives a soldier, convoy or crowd control formation a multi-shot non-lethal capability that can be used to break contact, enforce a buffer zone (stand off distance) with a violent crowd, or to clear an area of a violent crowd. It also can provide EPW facilities and US military detention facilities with similar capabilities.

**12 Gauge (Area) Round, XM1013:**

|               |                  |
|---------------|------------------|
| NSN.....      | 1305-01-470-2139 |
| Model .....   | XM1013           |
| Weight .....  | 0.344 lb         |
| Length .....  | 2.37 in.         |
| Diameter..... | 0.32 in.         |
| Cube .....    | 0.006 cu ft      |

**Performance:**

|                              |              |
|------------------------------|--------------|
| Maximum range .....          | 125 ft/38 m  |
| Maximum effective range..... | 60 ft/18.3 m |
| Velocity .....               | 900 fps      |

**Packaging:**

|                                |                        |
|--------------------------------|------------------------|
| Quantity .....                 | 320                    |
| Weight.....                    | 33 lb                  |
| Cube.....                      | 0.899 cu ft            |
| DODAC.....                     | 1305-AZ15              |
| UNO serial number .....        | 0012                   |
| UNO proper shipping name ..... | CARTRIDGES FOR WEAPONS |

**Shipping and Storage Data:**

|   |                       |
|---|-----------------------|
| Quantitydistanceclass/storag&compatibilitygroup | 1.4S                  |
| Storage code .....                              | Class V               |
| DOT shipping class .....                        | C                     |
| DOT designation .....                           | SMALL ARMS AMMUNITION |
| Packing quantity .....                          | 3,000 per set         |

## 40MM ROUNDS

The 40mm (point) and 40mm (area) rounds give soldiers the capability to stun/deter two to three people by delivering a strong blow to the body without penetrating the body. In crowd control it gives a soldier, convoy or crowd control formation a multi-shot non-lethal capability that can be used to break contact, enforce a buffer zone (stand off distance) with a violent crowd, or to clear an area of a violent crowd. It can also provide EPW facilities and US military detention facilities with similar capabilities.

### 40mm (Point) Round

#### WARNING

Shots fired at subjects closer than 10 meters or shots striking the head or groin may cause serious injury or death.

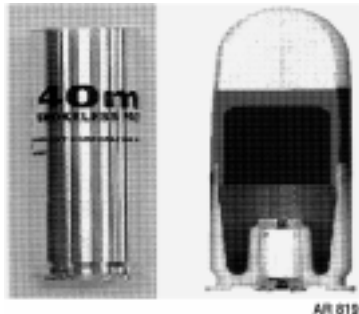
Beyond 50 meters the projectile loses accuracy and may no longer have the velocity required to stun an individual.

Use with Launcher M203. 40MM non-lethal munitions cannot be used with the MK19 MOD3 40MM grenade machine gun.

Use a dedicated gunner for the M1006 non-lethal cartridge separate from the M203 gunners that use black powder non-lethal round. This will avoid the potential for lodged M1006.

Plastic residue on the barrel produced from firing the M1006 cannot be removed with the standard M203 cleaning kit bore brush. Use the metal bore brush from the 40MM MK19 grenade machine gun kit, or fire a 40MM M781 practice or 40 MM M433, HEDP cartridge to remove the residue.

Do not fire M1006 against hard surfaces closer than 20 meters. There is a potential for rebounds and eye damage could occur. Eye protection for the gunner is recommended.



Cartridge, 40 Millimeter, Non-Lethal: 40mm  
Sponge Point Grenade, M1006:

|                          |  |
|--------------------------|--|
| NSN.....                 | 1310-01-452-1190                               |
| DODIC.....               | BA06   |
| Model.....               | M1006  |
| Part number.....         | 12977456                                       |
| CAGEC.....               | 19200  |
| Projectile material..... | Foam rubber nose and high density plastic body |
| Contents.....            | Black powder and primer                        |

## Weight:

|                       |                         |
|-----------------------|-------------------------|
| Cartridge .....       | 0.15 lb                 |
| Projectile .....      | 30 gr                   |
| Length .....          | 3.95 in.                |
| Diameter .....        | 40 mm                   |
| Cube .....            | 0.041 cu ft             |
| Effective range ..... | 10 to 50 m              |
| Maximum range .....   | 175 m                   |
| Muzzle velocity ..... | 265 +/- 20 fps          |
| Propellant .....      | Winchester mix (130 mg) |
| Primer .....          | M42C1                   |

## Temperature Limits:

|                               |        |
|-------------------------------|--------|
| Lower (use and storage) ..... | 0°F    |
| Upper:                        |        |
| Use .....                     | +125°F |
| Storage .....                 | -65°F  |

## Packaging:

|                         |   |
|-------------------------|---|
| Contents .....          | 22 rounds per metal box; 2 metal boxes (44 rounds) per wirebound wooden box |
| Quantity .....          | 44  |
| Weight .....            | 32 lb   |
| Cube .....              | 1.0 cu ft   |
| Outer packaging .....   | Wooden box  |
| Inner packaging .....   | M2A1 metal box  |
| Hazard class .....      | 1.4S  |
| Cartridge marking ..... | CARTRIDGE, 40MM, NON-LETHAL, M1006  |
| Packing quantity .....  | 2,400 per set   |



**40mm (Area) Multiple Rubber Ball (Stinger), 40B****WARNING**

This non-lethal munition has the potential for inflicting lethal injuries and should be used with discretion. Do not fire at live targets during training.

Probability of lethal injury increases as distance between operator and target lessens. Do not fire at a distance from target of less than 10 meters.

Never fire another round of any type to dislodge a projectile from the barrel.

**CAUTION**

After firing the previous version of 40B or 40F, clean barrel of black powder combustion residue and seared rubber residue before firing any other type of round. Failure to do so may result in projectile becoming lodged in-bore.

The 40-MM (area) round (stinger), 40B, gives the soldier the capability to stun or deter two to three people without penetrating the body. The round is designed to be fired at the center mass of the adult subject at ranges between 10 and 30meters.

**40mm (Area) Round (Stinger), 40B:**

|                       |                  |
|-----------------------|------------------|
| NSN.....              | 1310-00-X96-8808 |
| Part number .....     | 12977305         |
| Model .....           | 40B              |
| Weight .....          | 0.84 lb          |
| Length .....          | 4.8 in.          |
| Diameter.....         | 40 mm            |
| Cube .....            | 0.02 cu ft       |
| Performance:          |                  |
| Minimum range .....   | 10 m             |
| Maximum range .....   | 30.5 m           |
| Effective range ..... | 10-15 m          |
| Velocity .....        | 325 fps          |

**Packaging:**

|                |             |
|----------------|-------------|
| Quantity ..... | 64          |
| Weight.....    | 54 lb       |
| Cube.....      | 1.289 cu ft |

|                                |  |
|--------------------------------|--|
| Hazard class .....             | 1.4C                                     |
| UNO serial number .....        | 0339                                     |
| UNO proper shipping name ..... | CARTRIDGES FOR WEAPONS, INERT PROJECTILE |
| Packing quantity .....         | 2,400 per set                            |

**END OF WORK PACKAGE**